BRITISH PRECISION ENGINEERS' TOOLS

MAN

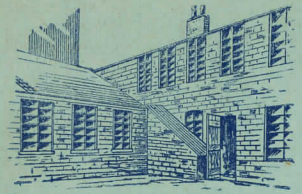
ALL PR
THIS CATAI
INCREASE
(High Spee
Silver St

ED BY

MOORE & WRIGHT
(SHEFFIELD) LTD. ENGLAND.

TELEPHONE NO's 23175 & 6

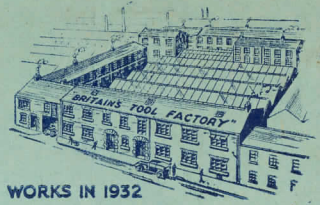
Wood Bros.,
6-10 South Road,
Southall,
Middx.



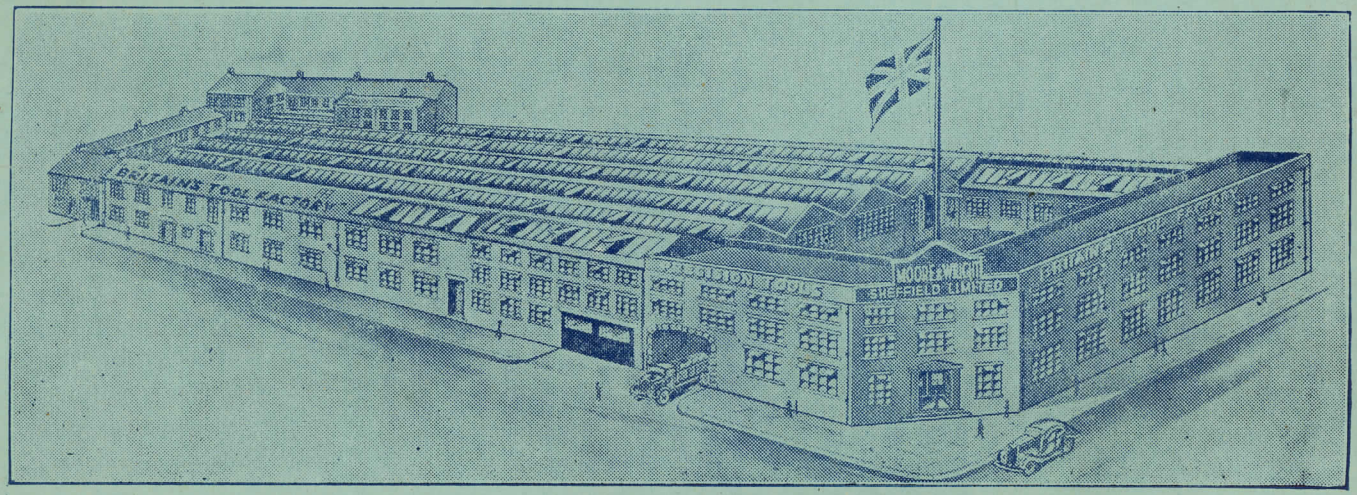
WORKS IN 1908

THE ILLUSTRATIONS SHOW
THE PROGRESS OF

"BRITAIN'S TOOL FACTORY"



WORKS IN 1932



1938 THE WORKS AS THEY WILL BE WHEN THE PRESENT EXTENSIONS ARE COMPLETED

List No. 38.A.
November, 1938

To the Tool Buyer

The Tools shown in this List are produced :—

1. In a healthy factory, **in SHEFFIELD, ENGLAND.**
2. Under good conditions of work and wages higher than current T.U. rates.
3. No garret labour or merchant (or middleman)—exploited work enters into their production at any stage.
4. Every worker, both male and female, on reaching 18 years has one week's holiday paid for.
5. Our retail prices are maintained everywhere.
6. Every tool is marked "Moore & Wright" or " Safe and Sure " as a guarantee that the above conditions are carried out.
7. Customers are given the full benefit **at once** of any improvement in manufacture.
8. Our guarantee is not an empty phrase, but a true contract between ourselves and you.
9. **BRITISH LABOUR** in all Tools—**NOTHING ELSE.**

Almost every practical improvement in Engineers' Tools for the last 10 years has originated in our workshops.

● *The prices in this Catalogue are only valid and current in Great Britain and Northern Ireland*

SOUTH SEAS EXHIBITION

DUNEDIN, 1926

HIGHEST AWARD AGAINST WORLD COMPETITION.

The above is an illustration of the Diploma awarded to us. **First Award of Merit AND Gold Medal** for the quality and finish of our tools.

WE WERE THE ONLY FIRM WHO OBTAINED THE DOUBLE AWARD ON SMALL TOOLS.

● MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

This Catalogue issued by

BRITAIN'S TOOL FACTORY SHEFFIELD

contains the most complete range of British Tools ever issued by a Manufacturer.

Every tool bearing any of our marks, i.e.,

"MOORE & WRIGHT." "MOORITE." "M & W" or "BRITAIN'S TOOL FACTORY,"

carries our full guarantee to do the work for which it was designed and sold, and if it fails will be exchanged free of charge if taken back to the place where purchased or returned carriage paid to Britain's Tool Factory, Sheffield.

This guarantee does not cover any liability beyond the replacement of the defective tool concerned, and no claim for personal injury, or injury or loss to third parties will be deemed to be within the scope of this guarantee which is limited to the replacement, as above.

THE ABOVE GUARANTEE does not apply to any article on which any name or mark has been struck by the purchaser, or which has been abused, nor does it apply to goods which have had long and hard wear.

We definitely do not **exchange,** free of charge, goods which have had hard and long wear, but where any defect is present we will put them in working order, if possible.

The prices given in this catalogue are the fixed retail prices at which the goods can be bought from any Tool dealer, Ironmonger or Stores in Great Britain. On receipt of p.c. we will give the name of nearest dealer carrying stock, or we will send from our works direct on receipt of the printed price.

Monthly credit accounts will be opened with dealers on receipt of two satisfactory trade references.

Cases charged at cost and full value allowed if returned carriage paid ; half cost allowed if kept.

Carriage Paid on lots of £10 net value in Great Britain. **Less than £10 carriage forward.**

P.S.—We reserve the right to alter the design or price of any article without notice.

HISTORICAL

The Micrometer was invented by James Watt in 1819, who felt the need of a more accurate measuring instrument than was obtainable at that time. A model of this Micrometer is to be seen in the South Kensington Science Museum.

As has happened in so many other inventions and discoveries, the development of the idea took place in other countries, and at the time we began the manufacture of these tools the trade was in the hands of foreign firms. We had been studying the weaknesses and drawbacks of the prevailing article for many years, and were impressed with the fact that all foreign Micrometers were fitted with unhardened screws with the attendant rapid wear, need of constant adjustment, and final inaccuracy. **We, therefore, introduced a screw made of one piece of hardened steel, with the threads ground after hardening, with all the internal strains of the steel released.**

This was the result of many years of experiment and research, and **enabled a Micrometer to be produced far in advance of anything then existing, both as regards quality and durability.**

The Micrometers shown in the following pages (excepting No. 938), are all fitted with the new process, hardened and thread ground screws.

ABOUT MICROMETERS

MOORE & WRIGHT Micrometers are made in a special factory built for the purpose at the request of the British Government. The building is of steel and concrete, specially devised to ensure rigidity and eliminate vibration.

The machines used in the production of micrometer screws are the most accurate we can procure. If and when better machines can be had we shall have them.

We guarantee every micrometer to be of the highest grade of accuracy, equal to the standard of the National Physical Laboratory's Class "A," adjustable micrometers excepted, and we will replace free of charge any tool not equalling this standard.

We cannot exchange, or be in any way responsible for, any tool that has been abused, tampered with, experimented on or had names, etc., stamped on. Apart from these points our guarantee has the most liberal interpretation.

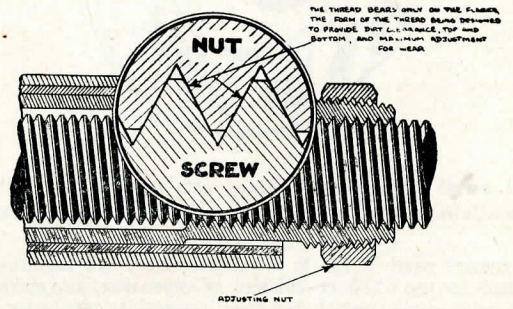
The salient points to which we wish to draw attention are the following:

SCREW

The Screw is made from **one piece** of special alloy tool steel, hardened throughout, and special attention is paid to "ageing" to avoid distortion and subsequent error. **The threads are ground out of the solid bar, after hardening, of an accuracy never before equalled, placing M. & W. Micrometers at least 10 years ahead of ANY foreign make.**

SCREW ACCURACY

The accuracy and long life of a screw depend on the accuracy of the flanks of the thread. We, therefore, ignore both the crest and the bottom of the thread and concentrate on the accuracy of the flanks. The illustration below will show why this construction is the best.



This form of thread besides ensuring the minimum wear and maximum life makes adequate provision for lubricating oil to be retained in the clearance shown on the top and bottom of each thread. Pieces of grit and dirt which get into the screw quickly find their way into the clearance and make for smoother working.

ABOUT MICROMETERS

continued.

MAIN NUT AND ADJUSTING NUT

The main nut is so placed that when adjusted the maximum number of threads are in contact.

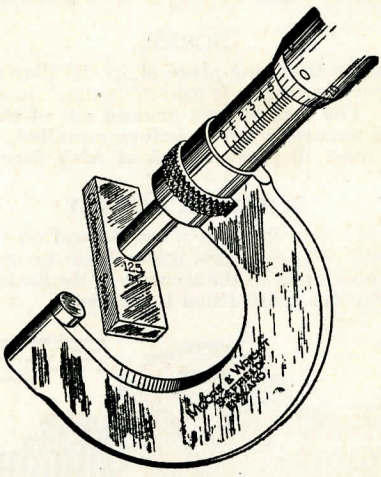
ACCURACY OF SPINDLE AND ANVIL FACES

The importance of accuracy at these two points is quite as great as the accuracy of the pitch, and we refer you to page 7 for our methods of checking.

FLATNESS OF ANVILS, Etc.

Johansson, P.V.E., and "Matrix" gauge blocks are by common consent acknowledged to be the most accurate, flat surfaces produced, and this flatness is demonstrable by the fact that they will wring together.

The anvil and spindle faces of M. & W. micrometers **will wring to block gauges** of the above makes as shown in the illustration below.



All anvil and spindle faces are tested for flatness and parallelism by the latest method of light interference.

The frames used in M. & W. micrometers are scientifically treated to ensure their having a low co-efficient of expansion, and during manufacture they are adequately rested between operations in order to ensure the elimination of internal strains which are inseparable from forging or casting.

NO foreign Micrometer can equal them for Accuracy and Durability

HOW M. & W. MICROMETERS ARE TESTED

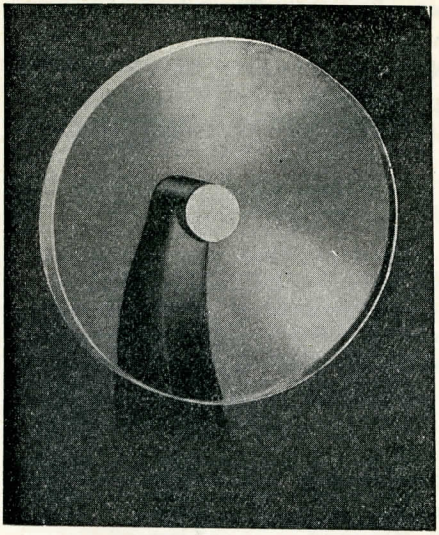


Fig. 1

The Spindle and Anvil faces on all M. & W. Micrometers are tested by optical parallels, i.e., by light interference. When the face, being tested, shows no coloured bands when the optical parallel is placed on it, the face is a true plane surface. This is shown in Fig. 1.

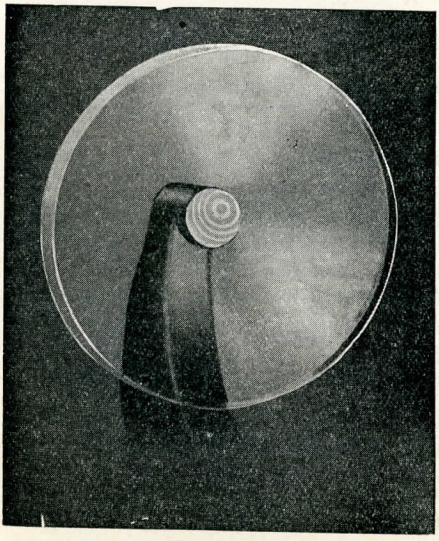


Fig. 2

When, however, the Anvil or Spindle face shows a series of coloured bands it is positive evidence that the face deviates from true planeness, Fig. 2. The number of bands or circles is in proportion to its inaccuracy. No face is passed as flat which shows more than one complete interference band, i.e., 10 millionths of an inch. This optical test is positive and accurate and entirely eliminates the uncertainty inherent in mechanical testing.

ABOUT MICROMETERS

continued.

● **These tools are not experiments. They have been put to the severest test both in the laboratory and in actual service, and are to-day IN USE IN EVERY GOVERNMENT DEPARTMENT and in practically EVERY IMPORTANT ENGINEERING CONCERN in the British Isles.**

We give below the names of **a few firms and institutions** who have given us permission to use their names as satisfied **USERS** of our micrometers.

National Physical Laboratory	Teddington.
Admiralty	Whitehall.
Air Ministry	London.
Admiralty Gauge Department	Sheffield.
Rolls-Royce Ltd.	Derby.
Barr & Stroud Ltd.	Glasgow.
Taylor, Taylor & Hobson Ltd.	Leicester.
Coventry Gauge & Tool Co. Ltd.	Coventry.
Cooke, Troughton & Simms Ltd.	London.
John Bibby, Sons & Co. Ltd. (Garston) ..	Liverpool.
W. & T. Avery Ltd.	Birmingham.
Lake & Elliott Ltd.	Braintree.
The Hoffman Manufacturing Co. Ltd. ..	Chelmsford.

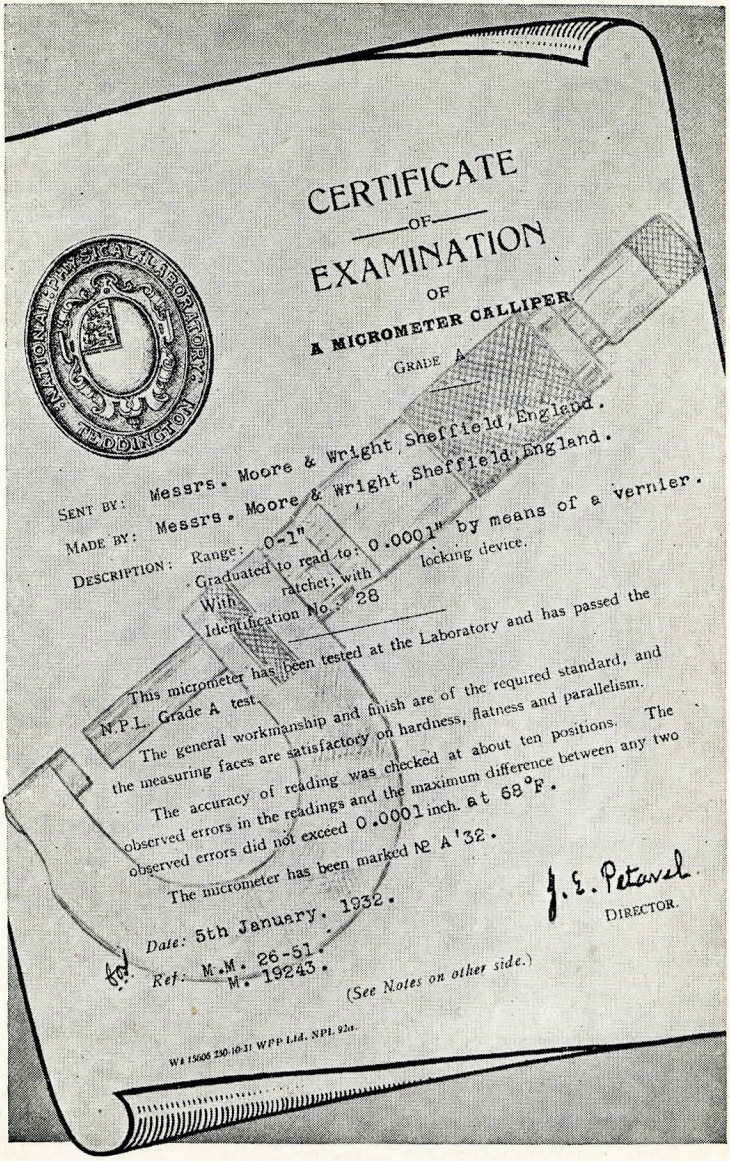
And EVERY Government Department and principal Railway Companies.

GUARANTEE

We definitely guarantee every one inch micrometer to an accuracy of 1/10,000 (one-tenthousandth) of an inch **at 68° Fahrenheit,** and certify that every micrometer passes this test before leaving our works. This is the equivalent of the National Physical Laboratory Test Class A for a 1 in. micrometer. Larger sizes are all guaranteed to the appropriate degree of accuracy specified by the N.P.L.

N.P.L. CERTIFICATES (National Physical Laboratory) Facsimile on next page.

N.P.L. Certificates will be furnished with Micrometers on payment of the following prices, which are additional to the prices of the tools :—Up to 1 in. 8/6, 1 in. to 2 in. 11/6, 2 in. to 6 in. 14/– each nett. Micrometer heads 6/– each nett. The N.P.L. (National Physical Laboratory) is the Standard Reference authority for the verification of all instruments of precision.



CERTIFICATE
OF
EXAMINATION
OF
A MICROMETER CALLIPER
GRADE A

NATIONAL PHYSICAL LABORATORY TEDDINGTON

SENT BY: Messrs. Moore & Wright, Sheffield, England.

MADE BY: Messrs. Moore & Wright, Sheffield, England.

DESCRIPTION: Range: 0-1"
Graduated to read to: 0.0001" by means of a vernier.
With ratchet; with locking device.
Identification No.: 28

This micrometer has been tested at the Laboratory and has passed the N.P.L. Grade A test.

The general workmanship and finish are of the required standard, and the measuring faces are satisfactory on hardness, flatness and parallelism.

The accuracy of reading was checked at about ten positions. The observed errors in the readings and the maximum difference between any two observed errors did not exceed 0.0001 inch. at 68°F.

The micrometer has been marked № A'32.

J. E. Petavel
DIRECTOR.

Date: 5th January, 1932.

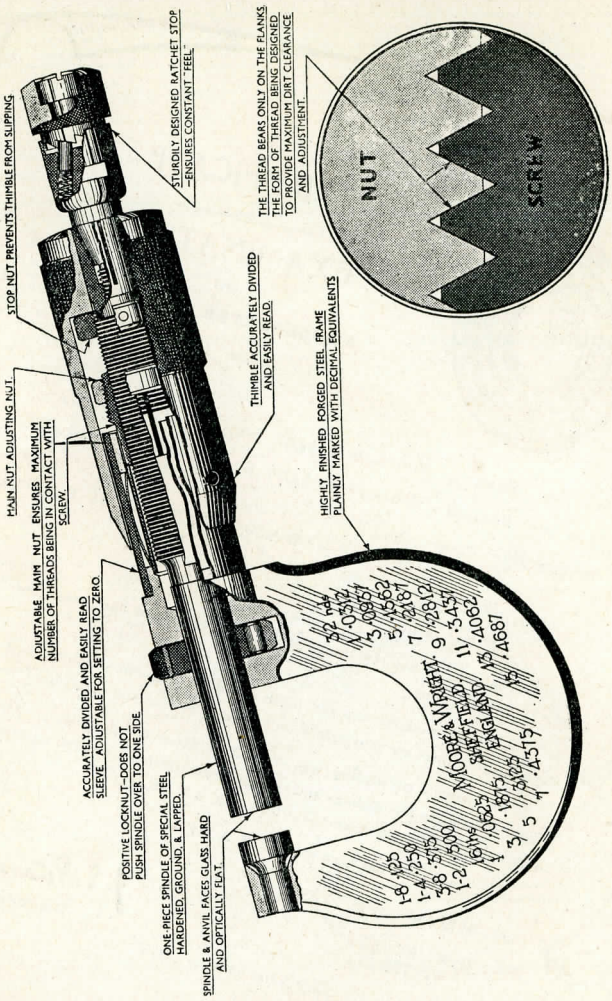
Ref: M.M. 26-51.
M. 19243.

(See Notes on other side.)

W& 15606 250-10-31 WPP Ltd. NPL 92a.

For prices of N.P.L Certificates see Page 8

SECTION SHOWING PRINCIPAL POINTS OF MOORE & WRIGHT'S MICROMETER.


STOP NUT PREVENTS THIMBLE FROM SLIPPING
STURDILY DESIGNED RATCHET STOP —ENSURES CONSTANT "FEEL"
THE THREAD BEARS ONLY ON THE FLANKS THE FORM OF THREAD BEING DESIGNED TO PROVIDE MAXIMUM DIRT CLEARANCE AND ADJUSTMENT
NUT
SCREW
MAIN NUT ADJUSTING NUT
ADJUSTABLE MAIN NUT ENSURES MAXIMUM NUMBER OF THREADS BEING IN CONTACT WITH SCREW.
THIMBLE ACCURATELY DIVIDED AND EASILY READ
HIGHLY FINISHED FORGED STEEL FRAME PLAINLY MARKED WITH DECIMAL EQUIVALENTS
ACCURATELY DIVIDED AND EASILY READ SLEEVE ADJUSTABLE FOR SETTING TO ZERO
POSITIVE LOCKNUT—DOES NOT PUSH SPINDLE OVER TO ONE SIDE
ONE-PIECE SPINDLE OF SPECIAL STEEL HARDENED, GROUND, & LAPPED.
SPINDLE & ANVIL FACES GLASS HARD AND OPTICALLY FLAT
MOORE & WRIGHT
SHEFFIELD
ENGLAND

The outstanding features of M. & W. Micrometers are :—

1. Perfectly designed Screw (see illustration) hardened and ground.
2. Larger thread diameter, giving larger thread area, consequently longer life.
3. Spindle and Screw of one piece of special Alloy Steel, almost impervious to wear
4. Optically flat spindle and anvil faces.
5. Larger range of adjustment on thimble and spindle than on any other Micrometer

Large size Charts of this illustration can be had for demonstration purposes in Schools Colleges, etc.

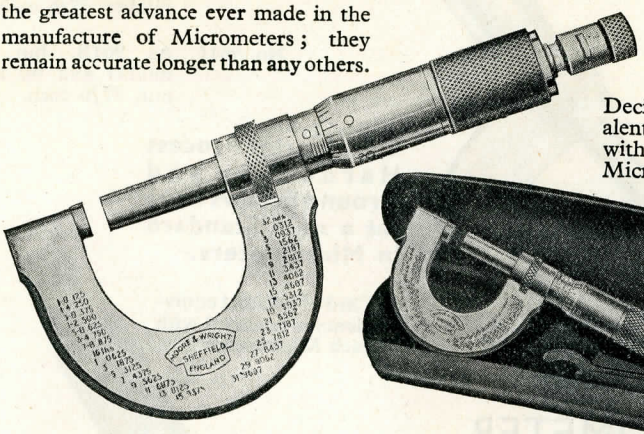
"Ten years ahead of all others"

BRITISH PRECISION MICROMETERS

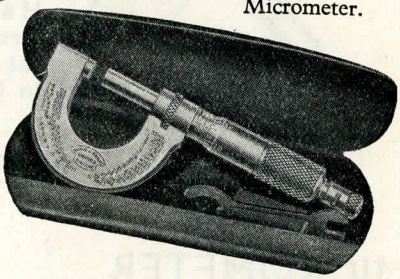
Fitted with

HARDENED AND GROUND SCREWS,

the greatest advance ever made in the manufacture of Micrometers; they remain accurate longer than any others.



Decimal equivalent card sent with each Micrometer.



All Micrometers of Series 961 are sent out in cases like above.

No. 961	As illustration, 0-1 in. graduated in 1/1000ths, with ratchet stop and lock nut, in leather-covered steel case ..	32/6 each
No. 961D	As above, but no ratchet	32/6 „
No. 961E	As above, but no ratchet and no lock nut	32/6 „
No. 961A	Exactly as No. 961, but graduated in half-thousandths	34/– „
No. 961F	As 961A, but no ratchet	34/– „
No. 961G	As 961A, but no ratchet and no lock nut	34/– „
No. 961C	Exactly as No. 961, but with every thousandth marked on thimble from 0 to 25	34/6 „
No. 961K	As 961C, but no ratchet	34/6 „
No. 961L	„ „ and no lock nut	34/6 „
No. 961O	As No. 961, with ratchet but no lock nut	32/6 „

All 961 series are in Case as illustrated, but can be supplied in soft leather cases at the same price if desired.

Metric Micrometers reading in 1/100 m/m supplied at the same price as above, add "M" to number when ordering.

Metric Micrometers are not supplied fitted with vernier except at special price.

Tungsten-Carbide tipped Micrometers, see page 17.

BRITISH PRECISION MICROMETERS

Hardened and Ground Screws give double the life.

Reading in ten-thousandths by Vernier.

No. 961B Exactly as No. 961, but reading in ten-thousandths by means of vernier on the sleeve, **37/6** each.

No. 961H As 961B, but no ratchet, **37/6** each.

No. 961J As 961B, but no ratchet and no lock nut, **37/6** each.

Our Special Process Hardened and Ground Screws have set a new Standard in Micrometers.

● Card of decimal equivalents is enclosed with each Micrometer.

MICROMETER

with CUT-AWAY FRAME

Hardened and Ground Screws ensure prolonged accuracy.

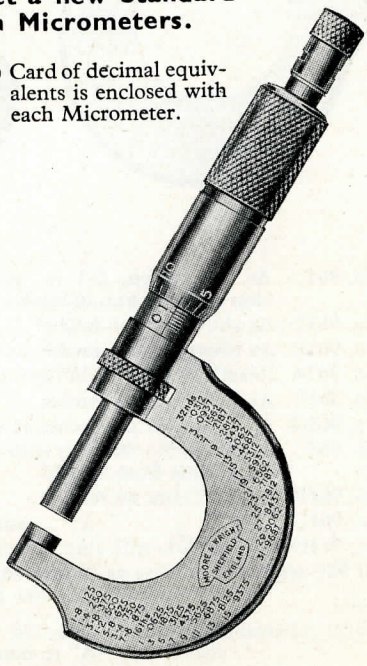
No. **961S** 0-1″

The Frame on this model is cut away so it can be used in places where the ordinary frame is too big. At the cut-away end the frame is about $\frac{11}{32}$ in. wide.

With Ratchet Stop and Locknut.

No. 961S Measuring in thousandths, in leather-covered steel case, **34/-** each.

No. 961SB Measuring in ten-thousandths, in leather-covered steel case, **39/-** each.



No. **961S** 0-1″

Tungsten-Carbide tipped Micrometers, see page 17.

● MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

BRITISH PRECISION MICROMETERS

Hardened and Ground Screws give Double the Life.

No. **965.** Enamelled Plain Black.

In this series the decimal equivalents are engraved on thimble, as shown.
This is a Micrometer of much improved pattern, with a frame of girder I section, light, yet very strong. The proportions of the frame have been very carefully worked out.

No. **965** Black Enamelled Frame, 0-1 in., graduated in thousandths, with ratchet and lock nut 22/6 each.

No. **965D** As above, but no ratchet 22/6 „

No. **965E** „ „ and no lock nut .. .. 22/6 „

No. **965A** As 965 but graduated in half-thousandths 24/- „

No. **965B** As 965, but reading in tenths of thousandths 27/6 „

The pattern below, i.e., No. 964, has been designed to facilitate measuring in holes, over shoulders, etc. It will measure in many places where the ordinary pattern cannot be used (see sectional illustrations on next page). The frame is of girder section, strong, yet light.

No. **964** Black Enamelled Frame, 0-1 in., graduated in thousandths, with ratchet and lock nut 22/6 each.

No. **964D** As 964, but no ratchet 22/6 „

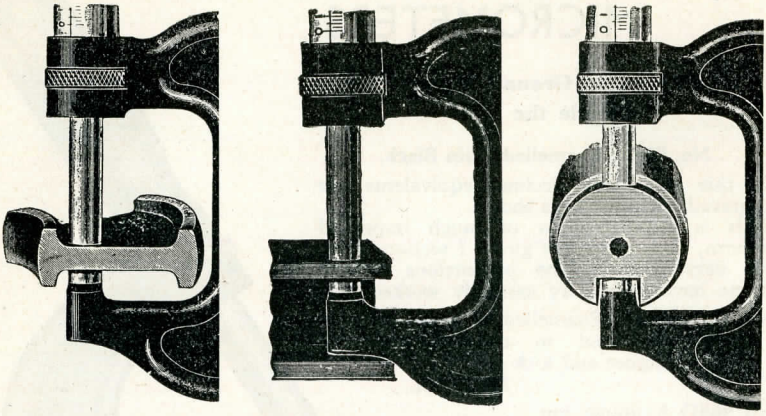
No. **964E** „ „ and no lock nut .. .. 22/6 „

No. **964A** As 964 but graduated in half - thousandths, with ratchet and lock nut .. .. .. 24/- „

No. **964B** As 964 but reading in tenths of thousandths.. 27/6 „

Tungsten-Carbide tipped Micrometers, see page 17.

PRECISION MICROMETERS



The above illustrations demonstrate the superiority of this type of frame, i.e., No. 964, for measuring in channels, over shoulders, in Keyways, etc., etc. places which are inaccessible to the ordinary Micrometer.

TUNGSTEN-CARBIDE TIPS.

Any Standard Flat Anvil Micrometers of 1″ capacity in this List may be fitted with Tungsten-Carbide tips at a cost of 36/– per Micrometer extra.

THE CARE AND ADJUSTMENT OF MICROMETERS

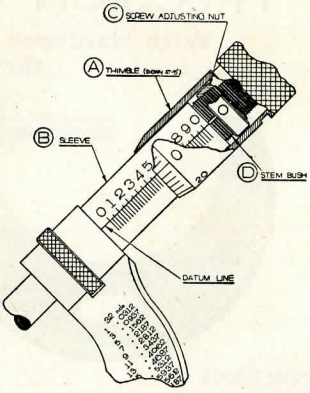
The life of a Micrometer, i.e., the time it remains accurate, depends on the treatment it receives. It should, therefore, be kept clean when not in use, in the case supplied. When taking measurements see that there is no dirt between the anvil and the spindle faces.

Do not force the screw hard on to any surface; using the ratchet ensures an even pressure.

ADJUSTMENT.

The adjustment of M. & W. Micrometers is made by means of the friction sleeve which fits on the stem. Any looseness of the screw must first be taken up by the small adjusting nut, which will be found at the top of the split stem. Clean the faces of the anvil and spindle and bring them together carefully, and then by means of the spanner adjust the sleeve until the zero line comes exactly opposite the zero line on the thimble.

HOW TO READ A MICROMETER



A Micrometer is a gauge operated by means of a screw. This screw, in a Micrometer adapted to English measurement, has 40 threads to an inch, thus, with one complete turn of the screw it advances 1/40th of an inch. One-fortieth of an inch equals 25 thousandths of an inch, i.e., 40/1000 =25 or .025″.

To the spindle is attached a thimble "A," the lower edge of which is bevelled and which is divided into 25 parts, each of which represents one-thousandth of an inch. On the inner sleeve "B" a vertical line parallel to the axis is cut. This is called the datum line and when the Micrometer is closed the line on the thimble marked "O" coincides with it. This is zero and all measurements are calculated from it. The sleeve "B" is graduated with a number of transverse lines and with each complete revolution of the thimble a new transverse line comes into view, that is each transverse line above zero denotes an opening of the Micrometer of .025″. Every fourth line is marked 1, 2, 3, 4, and so on. These figures represent tenths or one hundred thousandths of an inch. Suppose the thimble were screwed out so that graduation 2, and three additional sub-divisions were visible (as shown in Fig. 1), and that graduation 10 on the thimble coincides with the datum line on the sleeve. The reading would be 0.200+0.075 +0.010 or 0.285 inch.

HOW TO READ A MICROMETER

Graduated in 1/10,000″

To make a Micrometer read to ten thousandths of an inch it is provided with a Vernier which is graduated on the sleeve, and this is read in conjunction with the graduation on the thimble. On the sleeve are graduated ten divisions which occupy the same space as nine divisions on the thimble. It will be obvious, therefore, that the difference in width between each division on the thimble and each division on the sleeve is one tenth of a graduation. As the graduations on the thimble are thousandths, the difference is therefore one-tenth of a thousandth. When, therefore, the graduated line on the thimble (i.e., the thousandth line) does not exactly coincide with the vertical line on the sleeve, it is necessary to note which is the first vernier line which coincides exactly with a graduated line on the thimble. If this is the first line, i.e., that line numbered 1, add one-tenth to the thimble reading, if the second vernier line is the first exactly to coincide, add two tenths, and so on up to nine tenths, after that the thimble reading gives the next complete thousandth. Anyone can familiarise himself with taking exact measurements after a few minutes' practice.

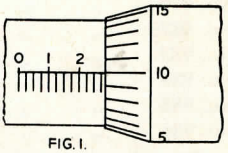


FIG. 1.

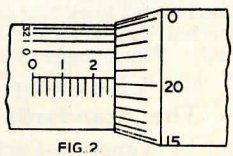


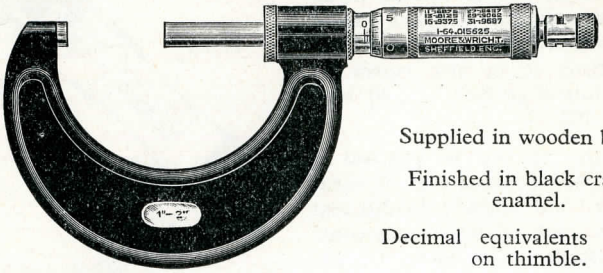
FIG. 2

"Ten years ahead of all others"

BRITISH PRECISION MICROMETERS

With Hardened and Ground Screws

LARGE SIZES.



Supplied in wooden boxes.

Finished in black crackle enamel.

Decimal equivalents marked on thimble.

IMPORTANT.
See Note on Page 18.

		Micrometer only.	Complete with Standard.
No. 966	Measuring from 1 in. to 2 in.	30/-	966X 35/- each
No. 967	„ „ 2 in. to 3 in.	32/6	967X 38/6 „
No. 968	„ „ 3 in. to 4 in.	35/-	968X 42/- „
No. 969	„ „ 4 in. to 5 in.	37/6	969X 45/6 „
No. 970	„ „ 5 in. to 6 in.	40/-	970X 49/- „
No. 971	„ „ 6 in. to 7 in.	43/-	971X 53/6 „
No. 972	„ „ 7 in. to 8 in.	46/-	972X 57/6 „
No. 973	„ „ 8 in. to 9 in.	50/-	973X 62/- „
No. 974	„ „ 9 in. to 10 in.	54/-	974X 67/6 „
No. 975	„ „ 10 in. to 11 in.	58/-	975X 72/6 „
No. 976	„ „ 11 in. to 12 in.	62/-	976X 77/6 „
	The following are made to order :—		
No. 977	Measuring from 12 in. to 13 in.	66/-	977X 82/6 „
No. 978	„ „ 13 in. to 14 in.	70/-	978X 87/6 „
No. 979	„ „ 14 in. to 15 in.	74/-	979X 92/6 „
No. 982	„ „ 15 in. to 16 in.	78/-	982X 97/6 „
No. 983	„ „ 16 in. to 17 in.	82/-	983X 102/- „
No. 984	„ „ 17 in. to 18 in.	88/-	984X 118/- „
No. 985	„ „ 18 in. to 19 in.	94/-	985X 126/6 „
No. 986	„ „ 19 in. to 20 in.	100/-	986X 135/- „

The above are all with Ratchet and Lock Nut. Supplied without Ratchet and Lock Nut at same price. Any of the above Micrometers can be marked with a vernier reading in ten-thousandths at an extra cost of 5/- each. When required add B to the number, e.g., 968B.

Metric Micrometers at same price. Add "M" to No. when ordering.

The Standards are full size with Insulated Grips

Tungsten-Carbide tipped Micrometers, see page 17.

MICROMETERS WITH TUNGSTEN-CARBIDE TIPS

- Any Standard Flat Anvil Micrometer 1 inch and upwards can be fitted with Tungsten-Carbide tips at a cost of 36/- per Micrometer extra. Micrometer heads so fitted are 18/- each extra.

- These prices apply only to Standard Micrometers having flat anvils and spindle ends. For other shapes, viz., ball, conical, set-down, etc., special quotations will be given.

SERVICE DEPARTMENT.

We have a fully equipped Service Department for the repair and maintenance of Micrometers at reasonable rates. : :

Estimates on request.

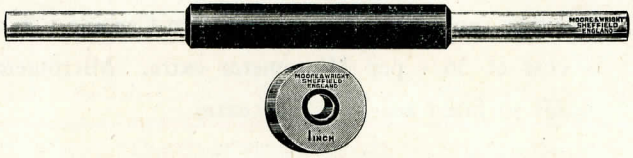
ENGRAVING.

Names and titles of firms can be engraved on Micrometers at a small charge.

STANDARD END MEASURING RODS

With Radial Ends.

ENGLISH MEASUREMENT.



No. **980**

These standards in the one inch size are in disc form. In the two inch size and larger they are made as rods and are fitted with vulcanized fibre handles to insulate them against the heat of the hand during use.

1 inch	Disc	5/- each	13 inch	Rod	17/6 each
2 „	Rod	6/- „	14 „	„	18/6 „
3 „	„	7/- „	15 „	„	19/6 „
4 „	„	8/- „	16 „	„	20/- „
5 „	„	9/- „	17 „	„	30/- „
6 „	„	10/6 „	18 „	„	32/6 „
7 „	„	11/6 „	19 „	„	35/- „
8 „	„	12/- „	20 „	„	37/6 „
9 „	„	13/6 „	21 „	„	42/6 „
10 „	„	14/6 „	22 „	„	45/6 „
11 „	„	15/6 „	23 „	„	48/- „
12 „	„	16/6 „	24 „	„	57/6 „

The Rod Standards are made with spherical or radial ends.
Hardened and lapped.

Metric Standards are supplied at the same prices as above for the same relative lengths.

Notice referred to on Page 16.

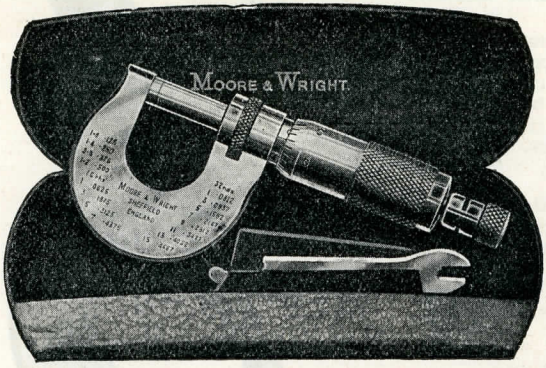
STANDARDS AND LARGE MICROMETERS

When buying large Micrometers it is recommended that a standard End Measuring Rod be purchased with each instrument, so that the setting can be checked each time before use. Where these tools are issued to operatives from the works' stores, **THE STANDARD SHOULD ALWAYS BE ISSUED WITH THE MICROMETER.** All M. & W. standards are insulated and are of full standard dimensions.

BRITISH PRECISION MICROMETERS

With Hardened and Ground Screws

"Brings them near perfection"

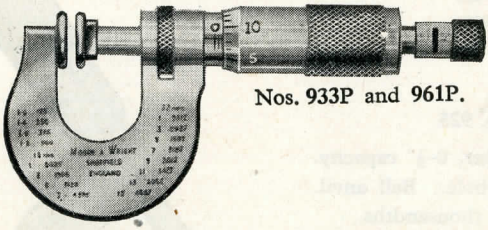


No. 933

No. 933	As illustration, 0-½", graduated in 1000ths with ratchet and locknut, in leather-covered steel case ..	26/- each
No. 933B	As above, but with vernier to read in 1/10,000ths ..	31/- „
No. 933E	As No. 933 but without ratchet and no locknut ..	26/- „

Decimal equivalents on frame.

MICROMETER for Paper and Soft Materials



Nos. 933P and 961P.

This Micrometer is made with large flanges for measuring paper, cloth, silk, rubber, and any soft materials. Measures in thousandths.

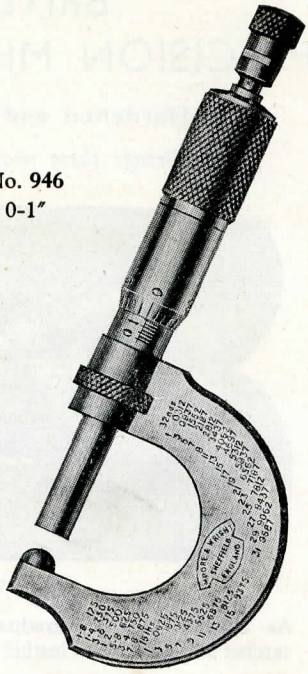
No. 933P	0-⅜" capacity	33/6 each
No. 961P	0-⅞" „	40/- „

MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

TUBE MICROMETERS

With Ball Anvil

Special Process Hardened and Ground Screws



No. 946
0-1″

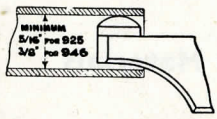
This Micrometer is similar to No. 961, except that it has a ball anvil and cut-away frame to enable it to be used to measure the wall of tubing and the like measurements. Will enter a $\frac{3}{8}$″ hole or tube.

No. **946** Measuring in thousandths, decimal equivalents on frame with Ratchet and Locknut.

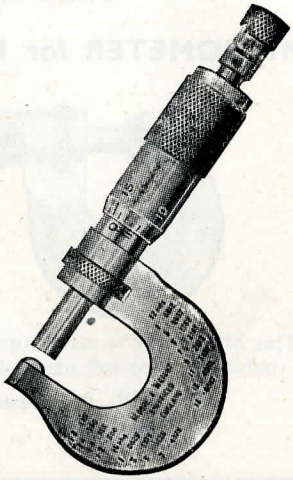
Price **34**/–

Packed one in a box.

For TUBING, ETC.



0 to .5″ Cat. No. 925
0 to 1.0″ Cat. No. 946



No. 925

Tube Micrometer, 0-$\frac{1}{2}$″ capacity. Goes into $\frac{5}{16}$″ hole. Ball anvil. Marked in thousandths.

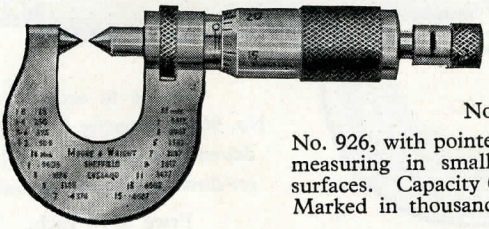
Price .. **26**/– each.

MICROMETERS

WITH POINTED ANVIL AND SPINDLE

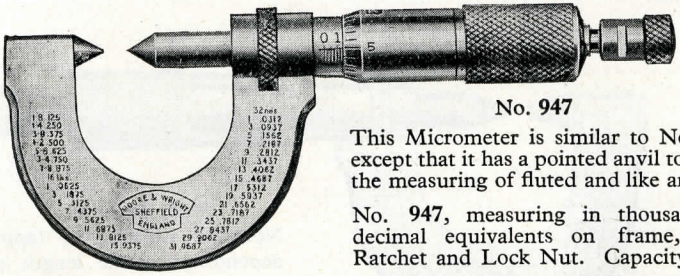
Special Process Hardened and Ground Screws

are fitted to all these Micrometers.



No. 926

No. 926, with pointed spindle and anvil for measuring in small recesses and curved surfaces. Capacity 0-$\frac{9}{32}$″.
Marked in thousandths .. **28**/-- each.



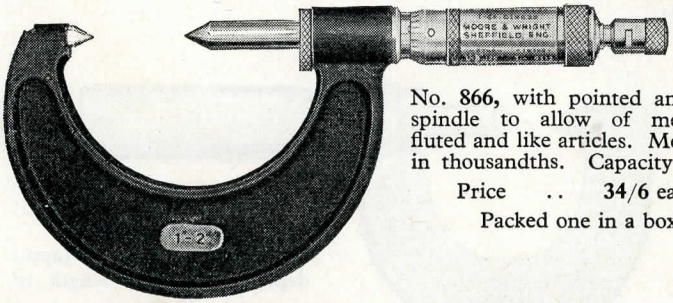
No. 947

This Micrometer is similar to No. 961 except that it has a pointed anvil to allow the measuring of fluted and like articles.

No. **947**, measuring in thousandths, decimal equivalents on frame, with Ratchet and Lock Nut. Capacity 0-$\frac{3}{4}$″.

Price .. **34/6** each.

Packed one in a box.



No. **866,** with pointed anvil and spindle to allow of measuring fluted and like articles. Measuring in thousandths. Capacity 1″-1$\frac{3}{4}$″.

Price .. **34/6** each.

Packed one in a box.

The above Micrometers have not needle-sharp points but are very slightly truncated.

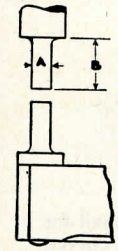
MICROMETERS

With specially-shaped Spindle Ends and Anvils.

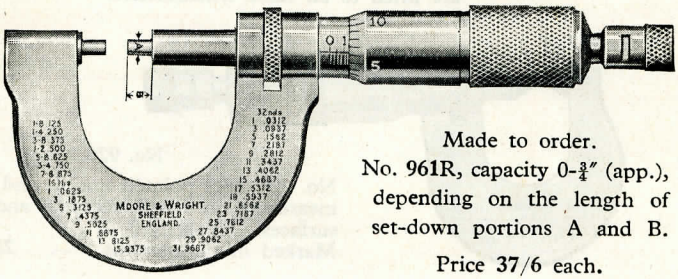
All fitted with

Special Process Hardened and Ground Screws

For SPLINES, RECESSES, ETC.



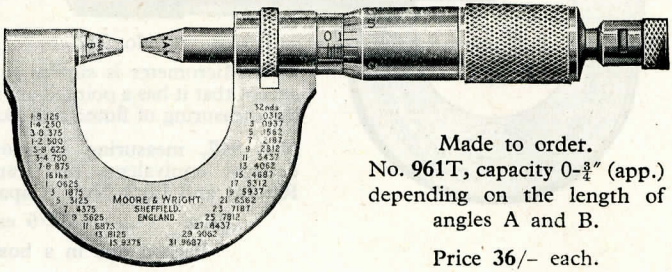
When ordering specify sizes A & B.



Made to order.
No. **961R**, capacity 0-¾″ (app.), depending on the length of set-down portions A and B.

Price **37/6** each.

For SPLINES ETC.

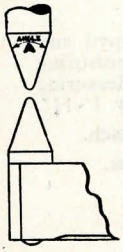


When ordering specify sizes A & B.

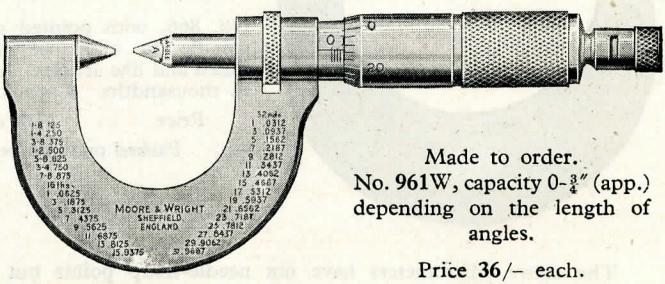
Made to order.
No. **961T**, capacity 0-¾″ (app.) depending on the length of angles A and B.

Price **36/-** each.

For FLUTED ARTICLES.



When ordering specify angle A.



Made to order.
No. **961W**, capacity 0-¾″ (app.) depending on the length of angles.

Price **36/-** each.

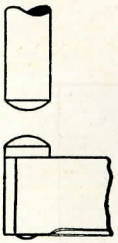
MICROMETERS

With Specially Formed Spindle-ends and Anvils.

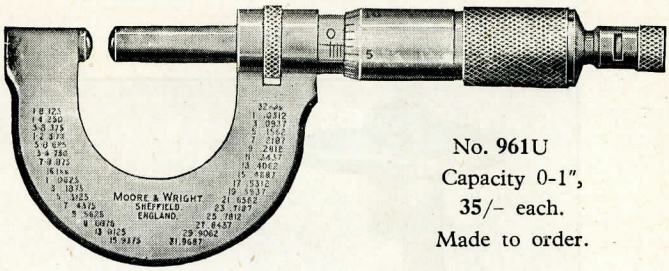
Fitted with

Special Process Hardened and Ground Screws

For CURVED ARTICLES

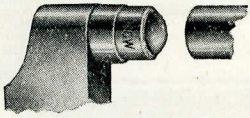


When Ordering add "U" to Catalogue No.



No. **961U**
Capacity 0-1",
35/- each.
Made to order.

BALL ATTACHMENT



No. **878**

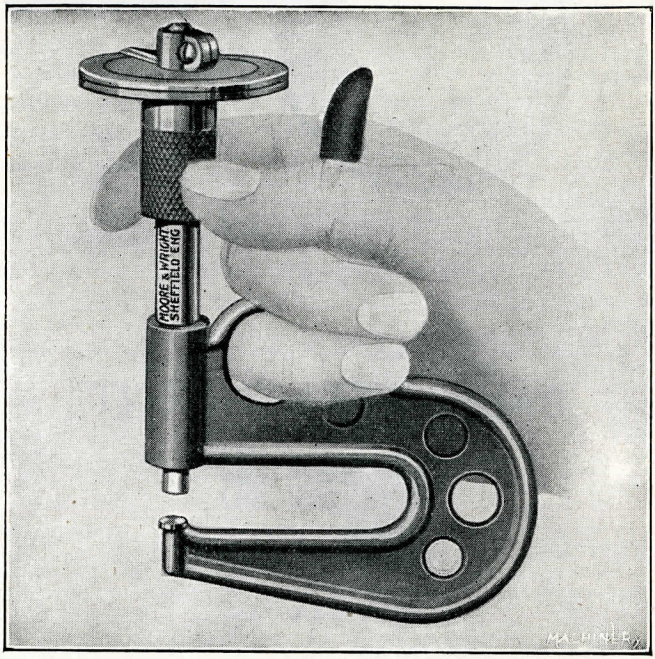
The above device is for attaching either to the spindle or anvil of standard 1" Micrometers. Either one or two attachments can be used at once. The ball is hardened and is .250" in diameter, which of course must be deducted from the actual measurement given by the Micrometer reading. The ball is movable in the cage so as to ensure a perfect contact with the anvil or spindle.

The ball in No. **878**M (Metric) is 6.5 m/m diam.

No. **878** price 2/- each. Fitting Spindles 6.8 m/m diameter.
„ **878M** „ 2/- „ „ „ 6.8 m/m „

Horizontal Type, Direct Reading and Quick Acting MICROMETER

No. 938



This Micrometer is fitted with an Eight Start Screw giving a range of ¼″. As only one revolution of the screw is used the complete capacity of the tool can be read on the dial direct. Used with one hand only, leaving the other free for holding the work. Dial, 3″ diameter.

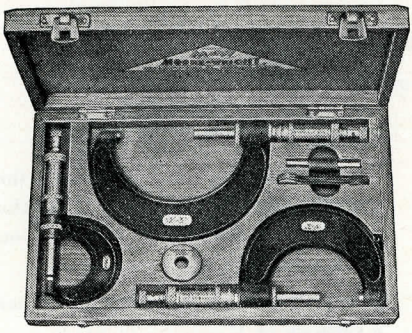
		£	s.	d.
No. 938/1	Frame 1½″ deep, capacity ¼″	4	10	0
No. 938/2	„ 2⅜″ „ „ ¼″	4	10	0
No. 938/6	„ 6″ „ „ ¼″	4	10	0

Reading in thousandths. Made to order.

The Screw in this Micrometer is not hardened.

MICROMETERS IN CASES

The Cases are of polished Oak, strong, and of good appearance.



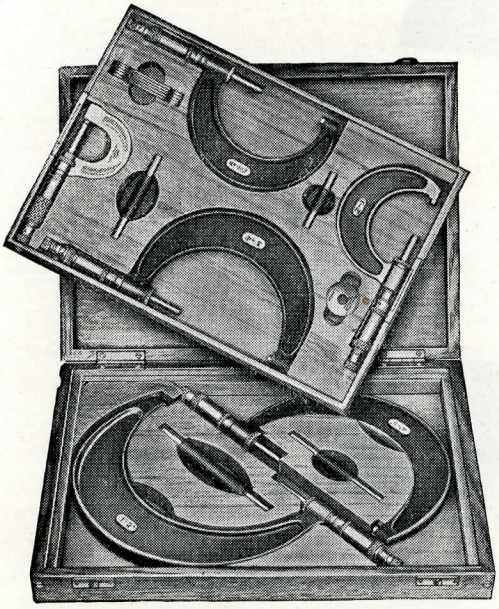
No. **1021** Consists of 1 Micrometer each, 961, 966 and 967, complete with Standards and Keys .. **£5/16/6**

No. **1025** Consists of 1 Micrometer each, 965, 966 and 967, complete with Standards and Keys, as illustrated. **£5/6/6**

These Micrometers are fitted with

Special Process Hardened and Ground Thread Screws

which places them ahead of all others.



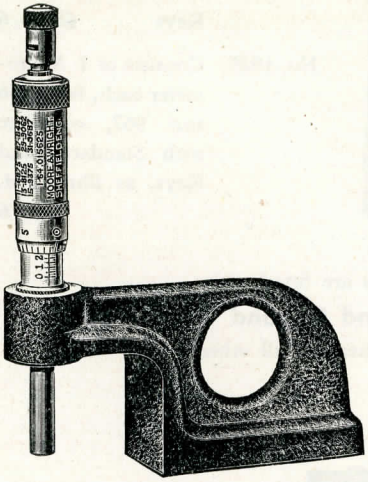
No. **1024** Case of 6 Micrometers, i.e., one each 961, 966, 967, 968, 969, 970, covering a range from 0 to 6″, complete with Standards and Keys, in high quality polished Oak Case, strong and of good appearance, as illustrated. **£13/9/6**

Any other assortment of micrometers can be supplied at proportionate prices.

No. 461. SURFACE GRINDER MICROMETER

Special Process Hardened and Ground Screw.

"Ahead of all others."

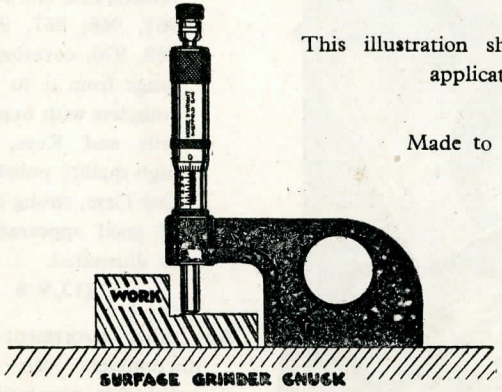


This Micrometer is for use on the surface grinder for measuring the thickness of work while it is still on the machine.

It is graduated in thousandths and has a capacity of 1".

No. 461 .. Price .. 32/6 each.

This Micrometer is fitted with a hardened steel plate on base. The end of the spindle is slightly rounded.



This illustration shows its general application.

Made to order.

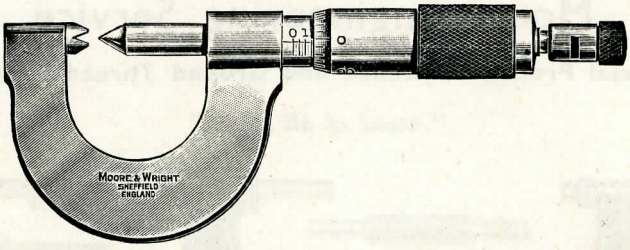
Tungsten-Carbide Tips 18/- per Micrometer extra.

MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

SCREW GAUGE MICROMETERS

Special Process Hardened and Ground Screw.

"Ahead of all others."



In Screw Thread Micrometers the end of the spindle is pointed and the anvil is of V form. When measuring threads only the angle of the point and the sides of the V anvil come into contact with the thread, thus the pitch diameter is measured, i.e., the full diameter less the depth of one thread. The actual reading on the Micrometer is the pitch diameter

These Micrometers are made as follows :—

No.	Capacity. Inches.	Range.	Form of Thread.	£	s.	d.
450	0–½	48 to 64 Threads	U.S. or Whitworth ..	2	5	0
452	0–1	8 to 13 „	„ ..	2	5	0
453	0–1	14 to 20 „	„ ..	2	5	0
454	0–1	22 to 30 „	„ ..	2	5	0
455	0–1	32 to 40 „	„ ..	2	5	0
456	1–2	4½ to 7 „	„ ..	2	10	0
457	1–2	8 to 13 „	„ ..	2	10	0
458	1–2	14 to 20 „	„ ..	2	10	0
459	1–2	22 to 30 „	„ ..	2	10	0

The ½″ and 1″ are supplied with bright frames, the 2″ are supplied with black enamelled frames. Made to order.

NOTE ON THREAD MICROMETERS.

Although Thread Micrometers are rapid and convenient in use, they have certain definite limitations.

It is only when the Micrometer is set to a standard Thread Plug and used for measuring threads having the same pitch and diameter as that plug that they are correct.

When not set to a plug in this manner there is always a slight amount of distortion, depending on the Helix angle of the thread being measured.

When set to a standard thread plug, it will be noticed that the reading is not exactly at Zero when the spindle and anvil are brought together.

The only method to ensure a Thread Micrometer giving correct measurements is to have a separate Micrometer for every size of thread being measured. This, of course, is impossible and therefore the small amount of error inherent in Thread Micrometers must be allowed for.

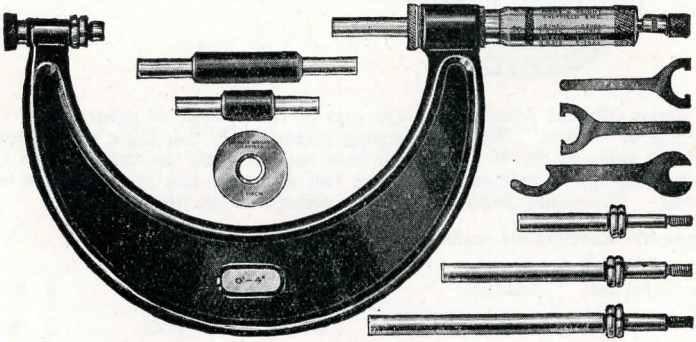
MOORITE ADJUSTABLE PRECISION MICROMETERS

for

Motor Engineering Service

Special Process Hardened and Ground Thread Screws.

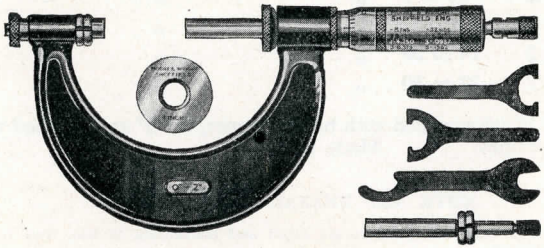
"Ahead of all others."



Set No. **941X**

All these Micrometers are sent out in Polished Cases as shown on next page.

Prices on next page.



Set No. **940X**

Micrometers reading in thousandths will always be sent unless Metric is definitely ordered, in which case please add M to the number.

PRICES AND DESCRIPTION OF

ADJUSTABLE MICROMETERS

These Micrometers have a range of measurement from two to four times greater than the ordinary Micrometer with fixed anvil. This large range is obtained by the use of separate anvils which are accurately fitted to the frame and are readily interchangeable. All sizes up to 6 inches have drop forged steel frames, while larger sizes have frames of carefully-chosen malleable grey iron. Decimal equivalents in thousandths of an inch are marked on the thimbles of the English reading, but not on Metric Micrometers.

The sets are sent complete with standards. All with Ratchet, Stop and Lock Nut. The standards are of **SUBSTANTIAL SIZE AND ARE ALL INSULATED, i.e., THEY ARE DEFINITE END MEASURING RODS.**

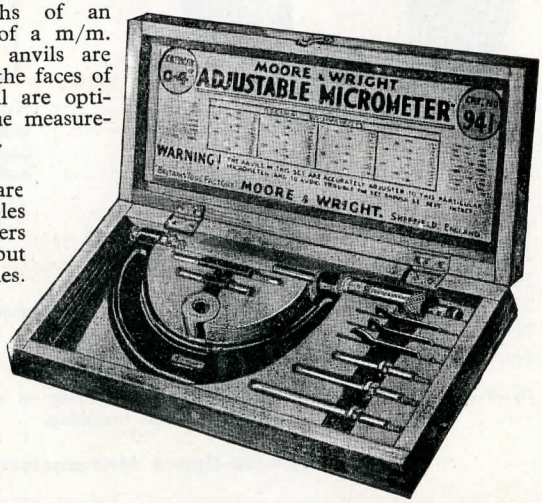
Each set is supplied complete in a finished wooden Case.

No.	Capacity. Inches.	Number of Standards.	Number of Interchangeable Anvils.	Price. £ s. d.
940X	0 to 2	1	2	2 9 6
941X	0 to 4	3	4	3 15 0
942X	2 to 6	4	4	4 12 6
943X	4 to 8	4	4	5 10 0
	The sizes below are made to order :—			
944X	6 to 10	4	4	5 15 0
1044X	6 to 12	6	6	8 10 0
945X	8 to 12	4	4	6 0 0
948X	12 to 16	4	4	7 10 0
949X	16 to 20	4	4	9 5 0
951X	20 to 24	4	4	11 0 0
1032X	18 to 24	6	6	15 5 0

The Micrometers are not supplied with verniers reading in tenths of thousandths.

These Micrometers cover the measurements given in thousandths of an inch or hundredths of a m/m. The interchangeable anvils are accurately fitted and the faces of the spindle and anvil are optically flat and give true measurements at any opening.

Decimal equivalents are marked on the thimbles of the Micrometers reading thousandths but not on the metric ones.



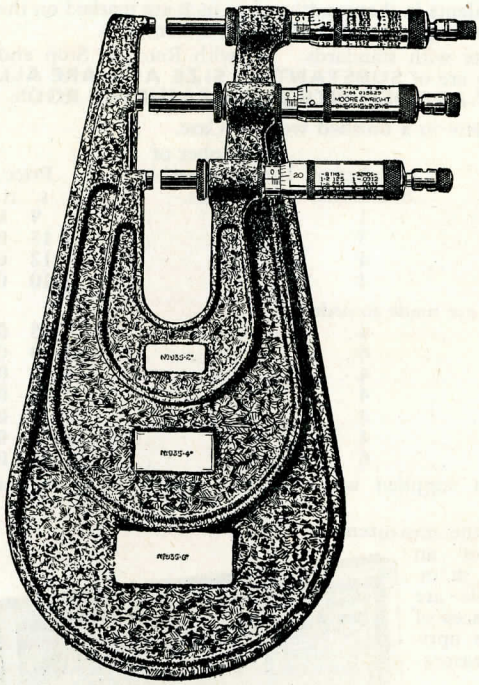
Instructions for Adjustment

Adjustment must be made by the sleeve and not by the nuts on the anvils.

MICROMETER WITH DEEP FRAME

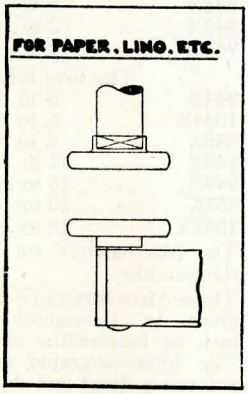
With Hardened and Ground Thread Screws

"Delicate touch with robust strength."



No. 935

These Micrometers are specially designed for gauging Sheet Metal, Paper, Fibre, etc., a long distance from the edge of the sheet. They will take 2″, 4″ or 6″ inside the frame. Supplied with ratchet stop and locknut, as illustrated. Graduated in thousandths.



No. 936 as No. 935 but with flanges for use on paper, linoleum and soft materials, prices below.

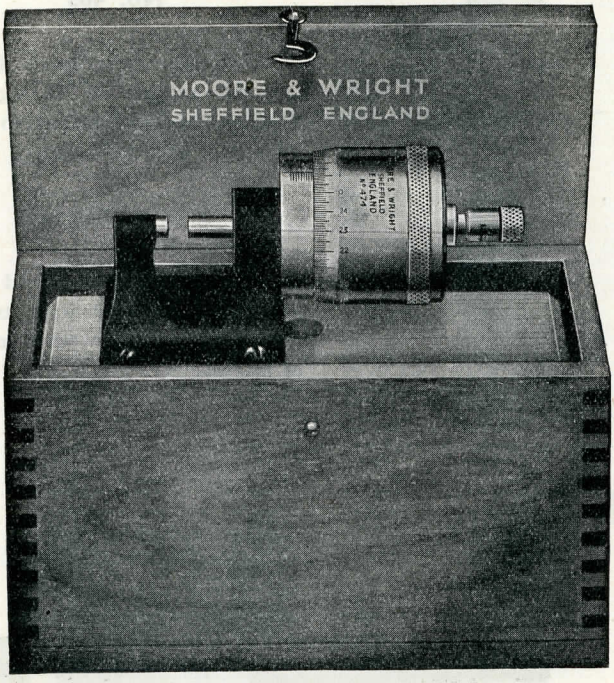
No. 935/2	with frame	2″	deep,	capacity	0 to $\frac{1}{2}$″	Price 33/– each.
No. 935/4	,,	4″	,,	,,	0 to 1″	,, 38/6 ,,
No. 935/6	,,	6″	,,	,,	0 to 1″	,, 45/– ,,
No. 936/2	,,	2″	,,	,,	0 to $\frac{7}{16}$″ approx.	,, 40/6 ,,
No. 936/4	,,	4″	,,	,,	0 to $\frac{7}{8}$″ ,, ..	,, 46/– ,,
No. 936/6	,,	6″	,,	,,	0 to $\frac{7}{8}$″ ,, ..	,, 52/6 ,,

Metric Micrometers supplied at the same price as above. Add "M" to number when ordering.

Tungsten Carbide-tipped Micrometers, see page 17.

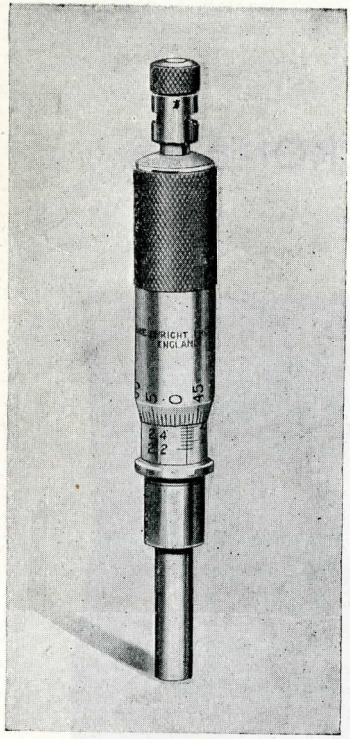
BENCH MICROMETER

No. 474



This Micrometer will be found useful for all fine bench work. It reads direct in ten-thousandths of an inch and the graduations are clearly cut to ensure easy reading. Made to order only.

No. 474 Capacity 0–½″, diam. of thimble 1½″, reads direct in ten-thousandths £5 5 0



MICROMETER HEADS

for

BORING BAR MACHINES

No. 465

We make these heads for all popular makes of Boring Bar Machines and shall be glad to quote on receipt of specification.

Made to order only.

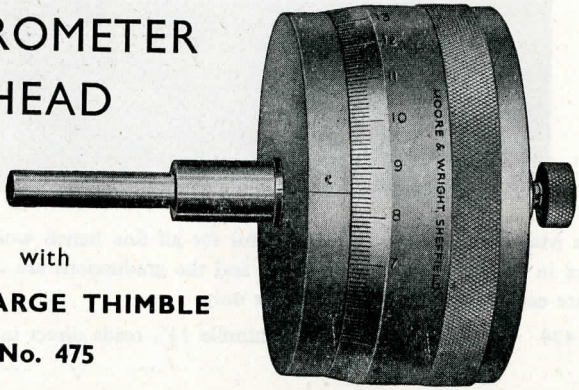
The hardened and ground screw gives a robust yet delicate strength not possible by any other method of manufacture.

MICROMETER HEAD

with

VERY LARGE THIMBLE

No. 475



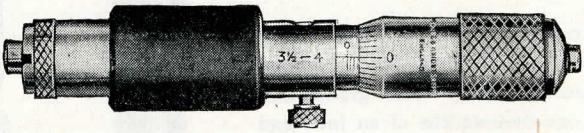
These heads are made for fitting to machines where accurate, direct reading is desired. The reading is in tenths of thousandths, the thimble is 3″ in diameter, thus allowing the graduations to be widely spaced and easily readable. Reading 0–1″ by tenths, size 4¼″ long. Made to order.

Price .. 75/– each, dull chrome plated.

● MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

TUBULAR
INSIDE MICROMETERS

No. 783



These Inside Micrometers are very handy to use, being made of tubing ; they are strong and light as the measuring anvils are ground to a radius they are adapted for measuring either flat or curved surfaces. Each Micrometer is fitted with a fibre insulation to prevent expansion due to hand heat.

No.	Range, Inches	Price, Each
783	*2 to 2 1-2	
	2 1-2 to 3	
	3 to 3 1-2	1/5/0
	3 1-2 to 4	
	4 to 4 1-2	
	4 1-2 to 5	
	5 to 6	
	6 to 7	
	7 to 8	1/7/6
	8 to 9	
	9 to 10	
	10 to 11	1/8/6
	11 to 12	

Metric Micrometers at same price for same relative size add M. to number when ordering.

Made to order only.

* This size has no clamp screw.

	£	s.	d.
No. **784**—Set of 7 Micrometers measuring 2″ to 6″, in wooden Case	9	12	6
No. **785**—Set of 13 Micrometers measuring 2″ to 12″, in wooden Case	19	0	0

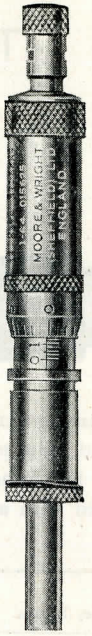
No. **786**—Handle for using with small sizes ..	each	0	1	3

MICROMETER HEADS

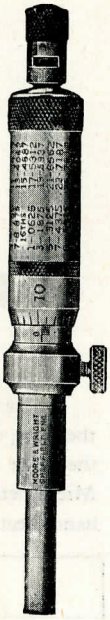
With Hardened and Ground Screws.

Micrometer Heads are used for fixing to Tools and Machines for obtaining fine measurements. The graduations are in one-thousandths of an inch and the heads are fitted with Ratchets and Lock-nuts. They can be supplied without Ratchets and Locknuts at same price.

Nos. **952** and **953** have $\frac{1}{2}''$ barrel.
„ **954** „ **955** „ $\frac{3}{8}''$ „



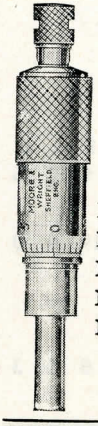
No. 952



No. 954

No. 952	As illustrated 1", barrel $\frac{1}{2}''$ dia., $\frac{3}{4}''$ long ..	each head	16/-
No. 952B	As above, but marked with vernier reading 1/10,000ths ..		21/-
No. 953	For use as Depth Gauges or for attaching to same ..		16/-
No. 954	As illustration, $\frac{3}{8}''$ barrel, $\frac{3}{4}''$ long		18/6
No. 954B	In 1/10,000ths		23/6
No. 955	As No. 954 but for use as depth gauge		18/6

Tungsten Carbide tips 18/- per head, extra. See page 17.



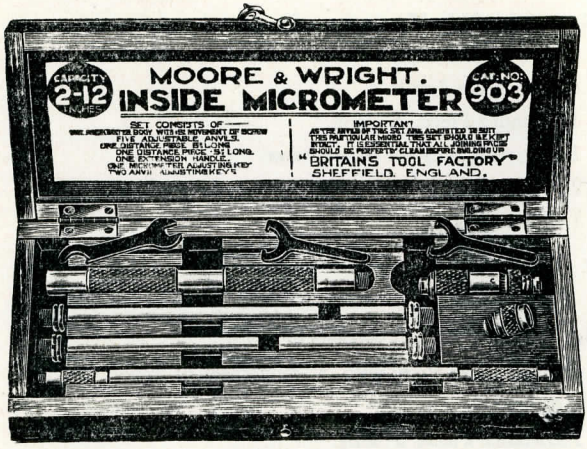
MICROMETER HEADS

of $\frac{1}{2}''$ capacity :—

		Each
No. 897	Half-inch head, in thousandths	15/-
No. 897B	„ „ in ten thousandths	20/-
No. 898	„ „ in thousandths, for Depth gauge	15/-
No. 899	„ „ Metric 1/100 m/m	15/-
No. 900	„ „ „ „ for Depth gauge ..	15/-

INSIDE
MICROMETER CALLIPERS

Hardened Thread Ground Screws, all measuring faces properly hardened and lapped.



The ends of all Anvils and Extension Rods are radial in form.

The illustration shows our Inside Micrometer No. 903 designed for taking Internal Measurements, Setting Gauges, etc. Capacity 2″ to 12″.

It is of robust design and **is easily and positively adjustable** on both Anvils and Micrometer Sleeve.

FOR PRICES AND PARTICULARS
SEE NEXT PAGE

INSIDE MICROMETER CALLIPERS

No. **902,** capacity 2″ to 8″, consists of :—

1 Micrometer Body with .5″ movement of Screw.
6 Adjustable Anvils.
1 Distance Piece, .5″ long.
1 Adjusting Key for Micrometer.
2 „ „ Anvils.
1 Extension Handle.

Price .. 32/6 each, in Case.

No. **903,** capacity 2″ to 12″, consists of :—

1 Micrometer Body with .5″ movement of Screw.
5 Adjustable Anvils.
1 Distance Piece, 5″ long.
1 „ .5″ „
1 Micrometer Adjusting Key.
2 Anvil Adjusting Keys.
1 Extension Handle is also included in the Price.

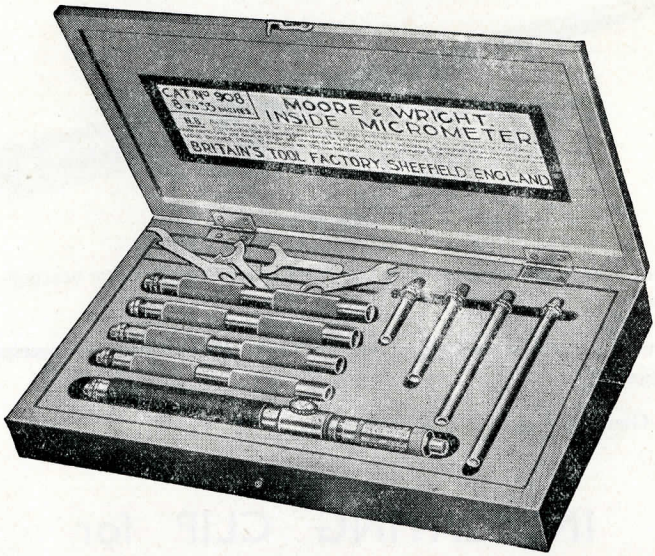
Price .. 40/- each, in Case.

IMPORTANT.—As the Anvils of this set are adjusted to suit each particular Micrometer, each set should be kept intact. In building up it is essential that all joining faces should be perfectly clean.

All anvils and measuring faces are radial.

INSIDE MICROMETER CALLIPER

FOR LARGE MEASUREMENTS.



Hardened Thread Ground Screws, all measuring faces properly hardened and lapped.

The illustration shows our Inside Micrometer No. 908 designed for taking Internal Measurements, Setting Gauges, etc. Capacity 8″ to 33″.

It is of robust design and is **easily and positively adjustable** on both Anvils and Micrometer Sleeve.

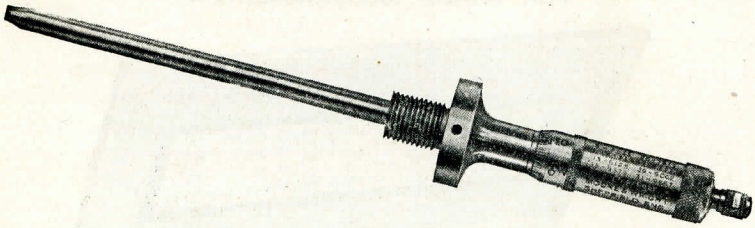
The Sets are made up as specified below :—

		Each.
No. **904**—1	Micrometer body with 1″ movement of Screw, 5 adjustable anvils and 4 adjusting Keys, measuring 8—13″	40/-
No. **905**—1	ditto as above with the addition of one 5″ extension piece, measuring 8—18″	45/-
No. **906**—1	ditto as above with the addition of two 5″ extension pieces, measuring 8—23″	50/-
No. **907**—1	ditto as above with the addition of three 5″ extension pieces, measuring 8—28″	55/-
No. **908**—1	ditto as above with the addition of four 5″ extension pieces, measuring 8—33″	60/-

Each Set complete in wooden box.

IMPORTANT.—As the Anvils of this set are adjusted to suit each particular Micrometer, each set should be kept intact. In building up it is essential that all joining faces should be perfectly clean.

TURBINE WEAR-DOWN GAUGES



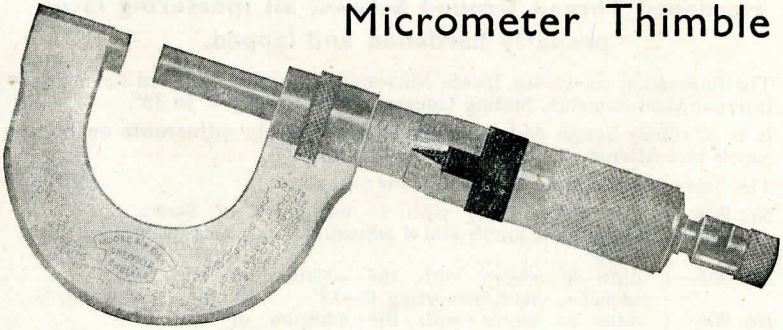
No. 895

These Gauges are for measuring the "wear-down" of Turbine bearings and similar work.

There are many varieties and we prefer to quote prices on receipt of specification.

Each Gauge is supplied in Wooden Case.

INDICATING CLIP for Micrometer Thimble

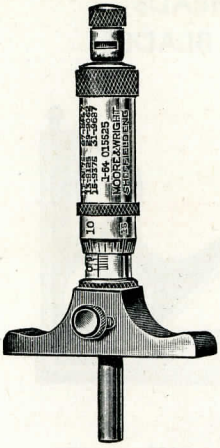


No. 877

This Indicating Clip shown above is an extremely useful attachment to any Micrometer. It avoids confusion and eye-strain and ensures instantaneous reading with certainty.

Price .. **3d.** each.

DEPTH GAUGE MICROMETER



Hardened and Ground Screw

No. **890**

This Gauge has a 1 inch movement of the screw, and will be found very useful in measuring grooves, holes or cavities.

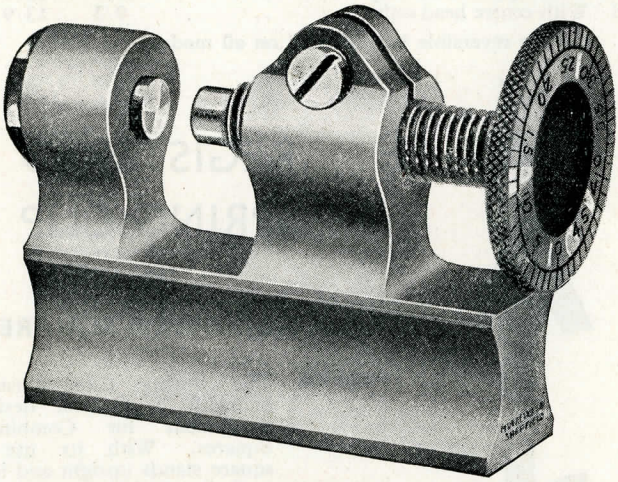
Diameter of spindle 6.8 m/m ; size of base $2\frac{1}{2}'' \times \frac{1}{2}''$.

It reads up to 1 inch, and has decimal equivalents marked on the thimble. It is a strong and rigid tool and is adjustable for wear.

No. **890** Price .. **32/6**

Made to order.

ROLLING MILL MICROMETERS



Nos. 178, 179.—These Micrometers are made very robust for use in rolling mills. They will stand very hard wear. The screw and dial is in one piece and they are provided with ample adjustment. Made with brass bodies.

No. **178** Brass body, short base, capacity $0–\frac{1}{2}''$ .. .. **16/9** each.

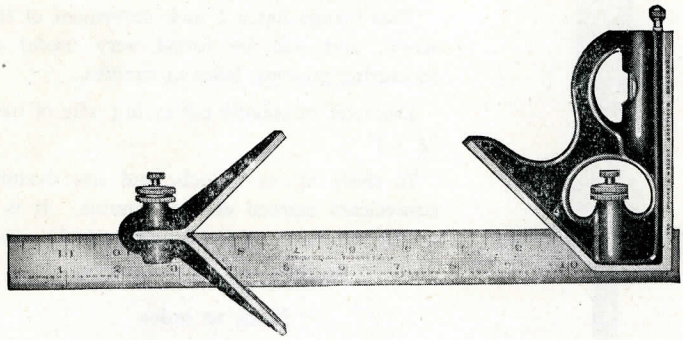
No. **179** „ „ long „ „ $0–\frac{1}{2}''$ .. .. **18/-** „

The Screws in Nos. 178 and 179 are not ground after hardening.

BRITISH COMBINATION SQUARES

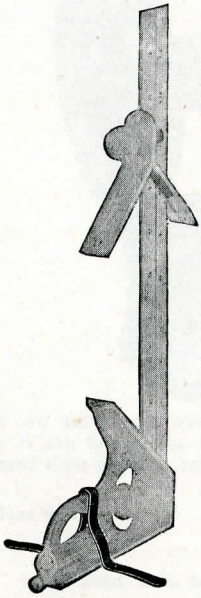
DROP FORGED STEEL HEADS
HARDENED & TEMPERED BLADES

Rockwell **50**



			12″	18″
No. **990**	With square and centre head	.. ..	16/6	21/– each.
No. **989**	With square head only ..	.. ..	11/3	15/9 „
No. **988**	With centre head only ..	.. ..	9/3	13/9 „

New reversible bolt is fitted on all models.



REGISTERED SPRING CLIP

for

COMBINATION SQUARES

No. **998** The Spring Clip illustrated herewith is a most desirable attachment for Combination Squares. With its use the square stands upright and is not easily knocked over.

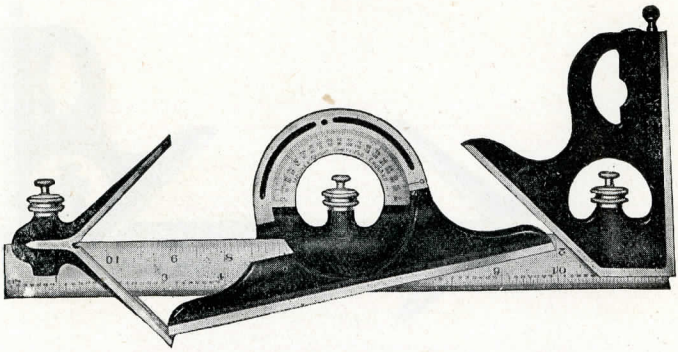
Price .. 3d. each.

One is given free with each Combination Square 990 and 992.

MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

BRITISH COMBINATION SETS

with or without
Protractor Heads



ALL DROP FORGED STEEL HEADS

Complete with Spring Clip shown on Page 40.

The revolving turrets in the protractors are graduated to read from zero to 180° and read in both directions.

New reversible bolt is now fitted on all models and allows the blade to be easily inserted.

The rule is perfectly graduated, is hardened and tempered, Rockwell 50, and is an accurate straight edge. The heads slide smoothly on the groove.

Special care has been bestowed on the graduations.

		12″	18″	
No. 988P	With centre head, protractor and rule..	26/6	30/–	each.
No. 989P	With square head, protractor and rule..	28/6	32/–	„
No. 990P	With square head, centre head, protractor and rule	33/9	37/3	„
No. 990P/1	Rule and protractor only	20/6	24/6	„

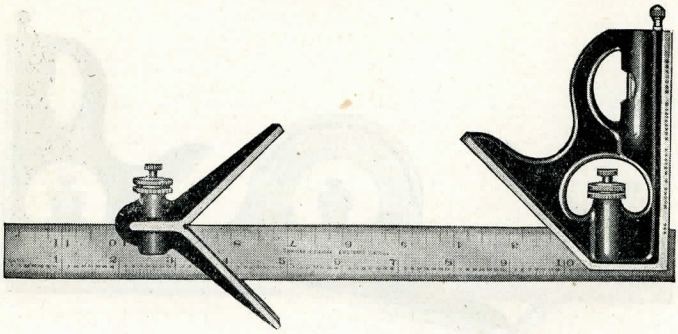
RULE GRADUATIONS.

"A" 8ths, 16ths, 32nds, 64ths.
"B" 16ths, 32nds, 64ths, 100ths.
"M.&E." 1 side in ½ m/m and 32nds. Reverse side in m/m and 64ths.

Graduation "A" will always be sent unless otherwise ordered.

BRITISH COMBINATION SQUARES

Complete with Spring Clip shown on Page 40.



HARDENED DROP FORGED HEADS

		12″	18″
No. 992	With square and centre head	20/–	24/– each.
No. 991	With square head only	13/6	17/6 „
No. 993	With centre head only	11/6	15/6 „

Each square head is fitted with level and scriber.

The heads are drop forged and hardened, and are practically unbreakable.

The rules are hardened and tempered, Rockwell 50.

The working faces are wide and are guaranteed accurate.

New reversible bolt is fitted on all models.

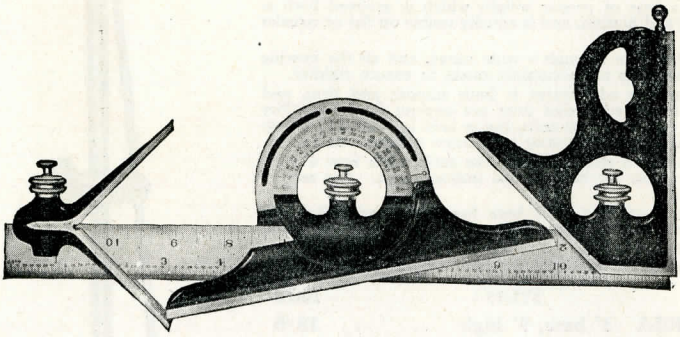
RULE GRADUATIONS.

"A" 8ths, 16ths, 32nds, 64ths.
"B" 16ths, 32nds, 64ths, 100ths.
"M.&E." 1 side in ½ m/m and 32nds. Reverse side in m/m and 64ths.

Graduation "A" will always be sent unless otherwise ordered.

BRITISH COMBINATION SETS

with or without Protractor Heads



WITH HARDENED DROP FORGED STEEL HEADS

The revolving turrets in the protractors are graduated to read from zero to 180° **and read in both directions.**

All the working faces are hardened.

New reversible bolt is fitted on all models and allows the blade to be easily inserted.

The rule is perfectly graduated, is hardened and tempered, Rockwell 50, and is an accurate straight edge. The heads slide smoothly on the groove.

Special care has been bestowed on the protractor graduations.

		12″	18″
No. 992P	Complete Set with Protractor, square head, centre head and Rule	37/6	41/6 each.
No. 992P/1	Rule and Protractor only	24/–	28/– ,,
No. 993P	With centre head, Protractor and Rule	31/–	35/– ,,
No. 991P	With square head, Protractor and Rule	33/6	37/6 ,,

RULE GRADUATIONS.

"A" 8ths, 16ths, 32nds, 64ths.

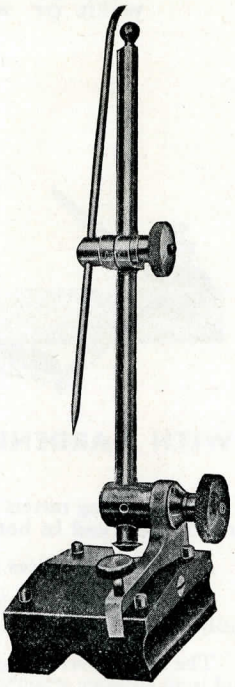
"B" 16ths, 32nds, 64ths, 100ths.

"M.&E." 1 side in ½ m/m and 32nds. Reverse side in m/m and 64ths.

Graduation "A" will always be sent unless otherwise ordered.

MOORITE
UNIVERSAL SURFACE GAUGE

No. 405



This Gauge is made throughout of the finest quality materials by experienced labour.

It has a base of proper weight which is grooved both at the end and bottom, and is equally usable on flat or circular work.

It is adjustable through a wide range, and all the moving adjusting parts are accurately made to ensure rigidity.

The sensitive adjustment is both smooth and firm, and in the improved design does not depend for its stability on two pointed screw-ends, but is held in position AGAINST THE FLAT SIDE OF THE SLOT by a screw of ample size.

The improved sleeve holding the scriber has now a ¼ in. diameter hole for holding dial indicator rod. See section illustration.

The case-hardened steel base has four frictionally-held pins, the use of which is an advantage on linear work, scribing, etc., etc.

The sizes given represent the total height of the gauge.

	Prices :	Each
No. 405A	3″ base, 9″ high	18/6
No. 405B	3″ base, with 2 spindles, giving 9″ and 12″ high, respectively	20/6
No. 405C	3″ base, 12″ high	19/6

Packed one in a **Wooden Box.**

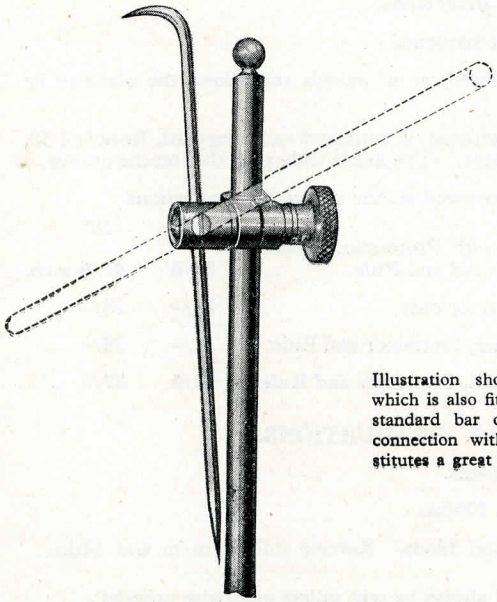
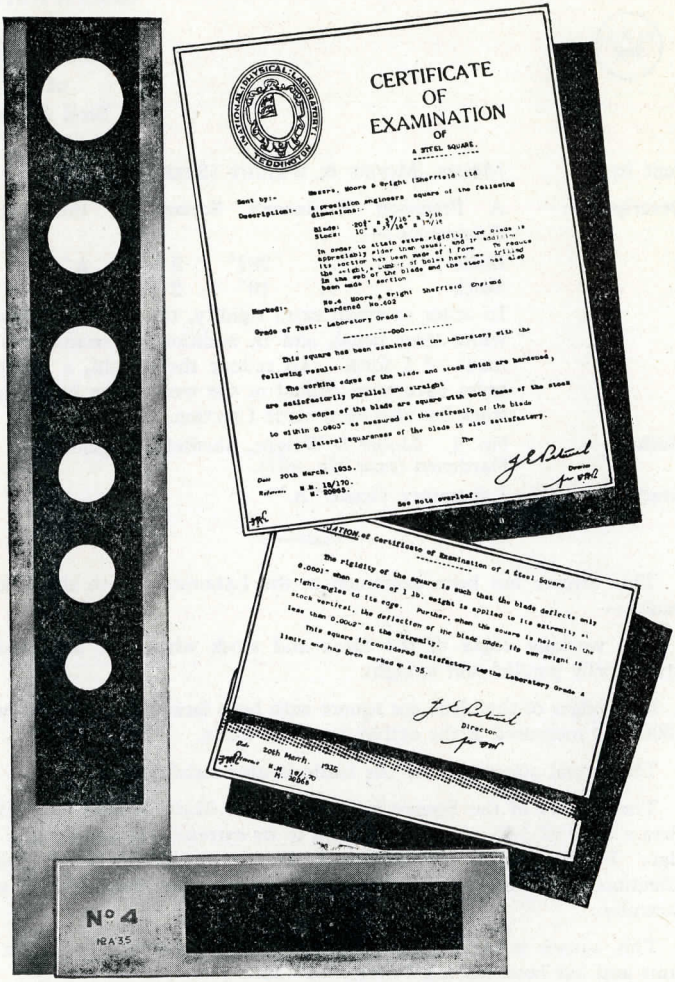


Illustration shows the new Scriber Clamp which is also fitted with ¼ in. hole to hold the standard bar of a Dial Indicator. This in connection with the very rigid spindle constitutes a great improvement in this Gauge.

See also page 106 for other Surface Gauges.

The World's MOST ACCURATE SQUARE

i.e.—It is the only Square of its size that has passed the Test detailed on the other side, viz. :—the new N.P.L. Grade A Test.



Catalogue No. **401**
Regd. Design 801669

PRICES ON PAGE 47.

MOOR & WRIGHT (SHEFFIELD) LTD. ENGLAND

Copy of N.P.L. Certificate Class "A" issued on a Steel Square

N.P.L. Seal

CERTIFICATE
OF
EXAMINATION
of
A Steel Square.

Sent by :— Messrs. MOORE & WRIGHT (SHEFFIELD) LTD.

Description :— A Precision Engineer's Square of the following dimensions :—

Blade .. .. $20\frac{3}{4}'' \times 3\frac{7}{16}'' \times \frac{3}{16}''$
Stock .. .. $10'' \times 2\frac{7}{16}'' \times \frac{15}{16}''$

In order to attain extra rigidity, the blade is appreciably wider than usual, and in addition its section has been made of I form. To reduce the weight, a number of holes have been drilled in the web of the blade and the stock has also been made I section.

Marked :— No. 4. Moore & Wright, Sheffield, England. Hardened (now No. 401).

Grade of Test :— Laboratory Grade "A."

This Square has been examined at the Laboratory with the following results :—

The working edges of the blade and stock which are hardened, are satisfactorily parallel and straight.

Both edges of the blade are square with both faces of the stock to within 0.0003″ as measured at the extremity of the blade.

The lateral squareness of the blade is also satisfactory.

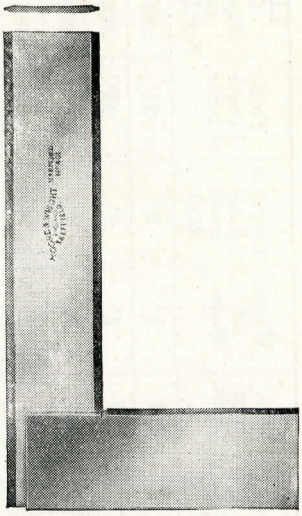
The rigidity of the Square is such that the blade deflects only 0.0001″ when a force of 1-lb. weight is applied to its extremity at right-angles to its edge. Further, when the Square is held with the stock vertical, the deflection of the blade under its own weight is less than 0.0002″ at the extremity.

This square is considered satisfactory to the Laboratory Grade "A" limits and has been marked N.P.L. "A" 35.

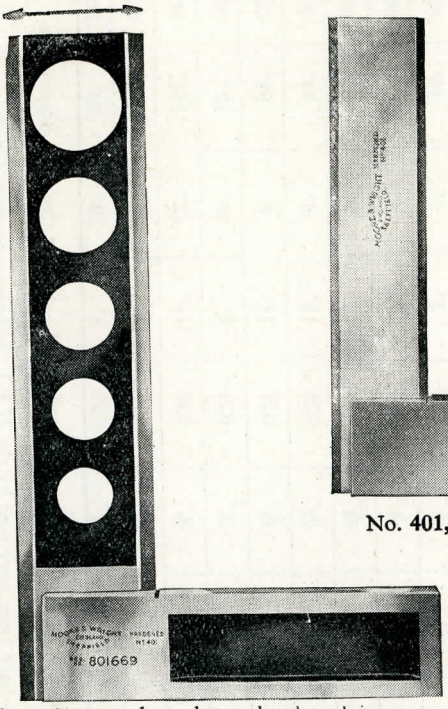
J. E. PETAVEL,
Director,
per F.H.R.

HIGH PRECISION ENGINEERS' SQUARES for reference purposes

No. **401**



No. **401,** up to 12″



No. **401,** 18″ and 24″

These Squares have been developed in conjunction with the National Physical Laboratory to produce a Square of the necessary accuracy to pass the new Class "A" limit recently introduced.

No Square of the old conventional form having a blade larger than 18″ will pass the new tests. It was necessary to introduce the design shown above (Reg. No. 801669) to meet the new demands, of which the rigidity and overhang tests are new and additional requirements.

The degree of accuracy guaranteed and dimensions of all sizes are given on page 48.

All sizes up to and including 12″ are made with solid blades with bevelled edges. Sizes 18″ and 24″ are made with relieved stocks and blades as illustrated. All No. 401 Squares are hardened.

Prices—No. **401**—

2″	3″	4″	5″	6″	8″	10″	12″	18″	24″
25/-	25/-	30/-	40/-	60/-	£5	£7	£9	£15	£20

The above prices are for Squares without Certificates. If N.P.L. Certificates are required they will be charged at cost, plus carriage to and from the Laboratory.

REFERENCE SQUARES No. 401

Size.	Thickness of Stock.	Width of Stock.	Length of Stock.	Thickness of Blade (at thickest part).	Width of edge of Blade.	Width of Blade.	Length of Blade inside Stock.	Total Length of Blade.	Limit for Square-ness N.P.L. "A"
2″	$\frac{5}{16}$″	$\frac{5}{8}$″	$1\frac{7}{8}$″	$\frac{1}{16}$″	·010	$\frac{5}{8}$″	2″	$2\frac{5}{8}$″	·0001″
3″	$\frac{3}{8}$″	$\frac{3}{4}$″	$2\frac{1}{2}$″	$\frac{1}{16}$″	·010	$\frac{3}{4}$″	3″	$3\frac{3}{4}$″	·0001″
4″	$\frac{1}{2}$″	1″	3″	$\frac{1}{16}$″	·010	1″	4″	5″	·00015″
5″	$\frac{5}{8}$″	$1\frac{1}{4}$″	$3\frac{1}{2}$″	$\frac{3}{32}$″	·015	$1\frac{1}{4}$″	5″	$6\frac{1}{4}$″	·00015″
6″	$\frac{3}{4}$″	$1\frac{1}{2}$″	4″	$\frac{5}{32}$″	·025	$1\frac{1}{2}$″	6″	$7\frac{1}{2}$″	·00015″
8″	$\frac{7}{8}$″	$1\frac{3}{4}$″	5″	$\frac{5}{32}$″	·025	$1\frac{3}{4}$″	8″	$9\frac{3}{4}$″	·0002″
10″	1″	2″	6″	$\frac{5}{32}$″	·025	2″	10″	12″	·0002″
12″	1″	$2\frac{1}{2}$″	7″	$\frac{3}{16}$″	·030	$2\frac{1}{2}$″	12″	$14\frac{1}{2}$″	·0002″
18″	$1\frac{1}{4}$″	3″	$10\frac{1}{2}$″	$\frac{3}{16}$″	·030	$3\frac{1}{2}$″	18″	21″	·00025″
24″	$1\frac{1}{2}$″	4″	14″	$\frac{5}{16}$″	·050	5″	20″	24″	·0003″

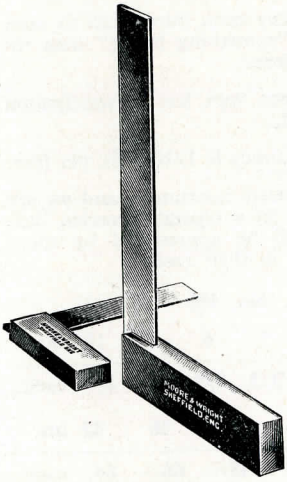
Blade and Stock plain, but edges bevelled.

Blade & Stock lightened out, edges bevelled.

Up to 12″ each Square is supplied in a strong wooden box. Larger than 12″, Squares are supplied in strong wooden sheaths.

The above dimensions have been approved by the N.P.L. as being necessary for obtaining and retaining the high accuracy required.

HARDENED TRY SQUARES



No. 402

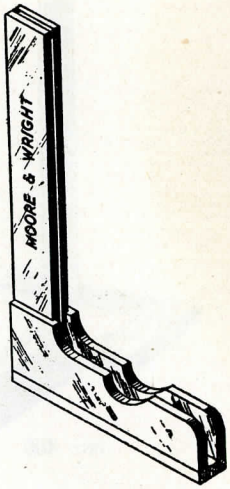
With hardened stocks and blades with glass-hard edges. A Square of the highest precision guaranteed to maintain permanent stability of form.

No. 402

2	3	4	5	in.
8/6	11/–	13/–	16/6	ea.

6	8	10	12	in.
19/–	28/–	40/–	45/–	ea.

18	24	in.
68/6	85/–	each.



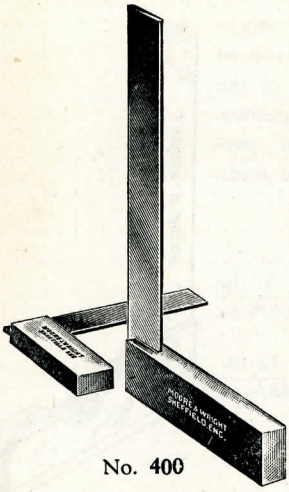
Guaranteed to N.P.L. limits Grade "B," which is, on No. 402 :— 2 and 3", .0002". 4, 5 and 6", .00025". 8, 10 and 12", .0003". 18", .0004". 24", .0005".

TRY SQUARE DIMENSIONS.

Size.	Thickness of Stock	Width of Stock	Length of Stock	Thickness of Blade	Width of Blade	Length of Blade inside Stock	Total Length of Blade
in.	in.	in.	in.	in.	in.	in.	in.
2	$\frac{5}{16}$	$\frac{5}{8}$	$1\frac{7}{8}$	$\frac{1}{16}$	$\frac{5}{8}$	$2\frac{1}{4}$	$2\frac{7}{8}$
3	$\frac{3}{8}$	$\frac{3}{4}$	$2\frac{1}{2}$	$\frac{1}{16}$	$\frac{3}{4}$	$3\frac{1}{4}$	4
4	$\frac{3}{8}$	$\frac{3}{4}$	3	$\frac{1}{16}$	$\frac{3}{4}$	$4\frac{1}{4}$	5
5	$\frac{7}{16}$	$\frac{7}{8}$	$3\frac{1}{2}$	$\frac{1}{16}$	$\frac{7}{8}$	$5\frac{1}{4}$	$6\frac{1}{8}$
6	$\frac{1}{2}$	1	4	$\frac{1}{16}$	1	$6\frac{1}{4}$	$7\frac{1}{4}$
8	$\frac{5}{8}$	$1\frac{1}{4}$	5	$\frac{3}{32}$	$1\frac{1}{4}$	$8\frac{1}{4}$	$9\frac{1}{2}$
10	$\frac{3}{4}$	$1\frac{1}{2}$	6	$\frac{5}{32}$	$1\frac{1}{2}$	$9\frac{3}{4}$	$11\frac{1}{4}$
12	$\frac{7}{8}$	$1\frac{3}{4}$	7	$\frac{5}{32}$	$1\frac{3}{4}$	$12\frac{1}{4}$	14
18	$1\frac{1}{4}$	3	$10\frac{1}{2}$	$\frac{3}{16}$ edge	$3\frac{1}{2}$	18	21
24	$1\frac{1}{2}$	4	14	$\frac{5}{16}$ „	5	20	24

ENGINEERS' STEEL SQUARES

PRECISION GROUND



No. **400**

These Squares have been introduced to meet the demand for "something better" than the article usually offered.

The Price has been kept low in anticipation of a large demand.

The degree of accuracy is 1/1000 in. per foot.

A Square is a delicate instrument and we are packing each one in a separate wooden box, believing this will be appreciated by those who take a pride in their tools.

No. **400**

2	3	4	5	6	8	10	ins.
2/6	**2/9**	**3/–**	**3/3**	**3/9**	**6/–**	**8/–**	each
12	18	24	30	36	42		ins.
10/–	**20/–**	**33/–**	**48/–**	**66/–**	**84/–**		each

Up to 12″ each Square is supplied in a strong wooden box. Larger than 12″ Squares are supplied in strong wooden sheaths.

We would draw attention to the increased strength of the blades of all squares 8 inches and larger.

TRY SQUARE DIMENSIONS

(approx.)

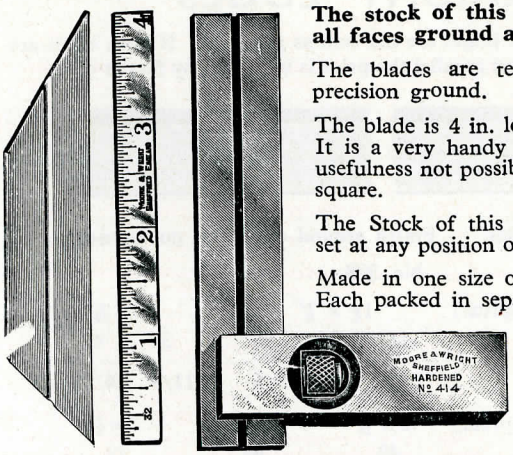
Size.	Thickness of Stock.	Width of Stock.	Length of Stock.	Thickness of Blade.	Width of Blade.	Length of Blade inside Stock.	Total Length of Blade.
Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches
2	5/16	5/8	1 7/8	1/16	5/8	2 1/4	2 7/8
3	3/8	3/4	2 1/2	1/16	1	3 1/4	4
4	3/8	3/4	3	1/16	1	4 1/4	5
5	7/16	7/8	3 1/2	1/16	1	5 1/4	6 1/8
6	1/2	1	4	1/16	1	6 1/4	7 1/4
8	5/8	1 1/4	5	5/64	1 1/4	8 1/4	9 3/8
10	3/4	1 1/2	6	5/64	1 1/2	9 3/4	11 1/4
12	3/4	1 3/4	7	5/64	1 3/4	12 3/8	14
18	1	2 1/2	10	5/64	2 1/2	18 1/4	20 3/4
24	1 1/4	2 1/2	13	5/64	2 1/2	21 1/2	24
30	1 1/2	3	15	5/64	3	27	30
36	1 1/2	3 1/2	18	1/16	3 1/2	32 1/2	36
42	1 1/2	3 1/2	21	1/16	3 1/2	38 1/2	42

A Handsome Display Board of Polished Beech is presented Free of Charge with every first order for One Dozen Squares.

● MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

ADJUSTABLE TRY SQUARE

No. 414



The stock of this Precision Square has all faces ground and hardened.

The blades are tempered and the edges precision ground.

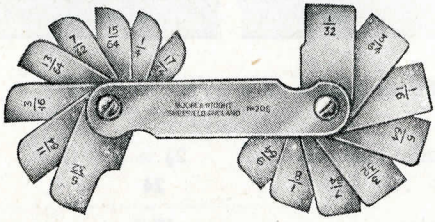
The blade is 4 in. long and the stock 2½ ins. It is a very handy tool and has a range of usefulness not possible with an ordinary fixed square.

The Stock of this Square can be instantly set at any position on the blade.

Made in one size only as above mentioned. Each packed in separate wooden box.

No. 414	With 1 blade as shown	10/6 each
No. 414/1	With narrow graduated blade in addition to standard blade in 1/64″	12/6 each
No. 415/1	Ditto, but rule in 1/100ths	13/– each
No. 414/2	Complete, as illustrated, with three blades, rule in 1/64ths	15/– each
No. 415/2	„ „ „ 1/100	15/6 each

RADIUS GAUGES



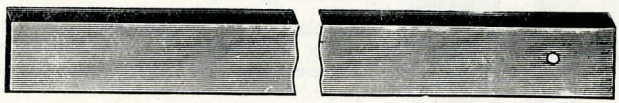
No. 206

No. 206 This tool contains 16 gauges of radii from $\frac{1}{32}$ in. to $\frac{31}{64}$ by 64ths. Usual M. & W. quality and guarantee.

PRICE 5/– EACH

ENGINEERS' LIGHT STEEL STRAIGHT EDGES

NOTE.—These Straight Edges are not sold as parallels. If both edges are required accurate and parallel the price is increased by 50 per cent.



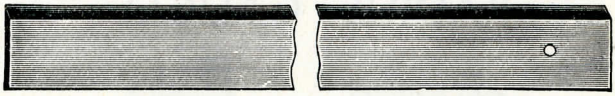
Rough ground on sides. Finish ground on edges, not hardened.

No. 308

Width and Thickness (approx.)	$1\frac{3}{4} \times \frac{1}{8}''$			$2 \times \frac{3}{16}''$	
Length in inches	18	24	30	36	42
Plain, one bevel edge	5/3	7/6	9/6	11/9	14/9 each
Width and Thickness (approx.)	$2 \times \frac{3}{16}''$		$3 \times \frac{1}{4}''$	$3 \times \frac{1}{4}''$	
Length in inches	48		60	72	
Plain, one bevel edge	16/6		22/6	30/–	each

Wrapped Singly.

HEAVY STEEL STRAIGHT EDGES



Finish ground all over, not hardened.

No. 309

Width and Thickness (approx.) ..	$2\frac{1}{2} \times \frac{1}{4}''$		$2\frac{1}{2} \times \frac{1}{4}''$	
Length in inches	24		30	
Plain, one bevel edge	17/6		25/–	each
Width and Thickness (approx.) ..	$3 \times \frac{5}{16}''$		$4 \times \frac{1}{2}''$	
Length in inches	36	48	60	72
Plain, one bevel edge	30/–	47/6	63/–	80/– each

Wrapped Singly.

ACCURACY of STRAIGHT EDGES

TOLERANCE FOR **STRAIGHTNESS** OF EDGE (EITHER SINGLE OR DOUBLE EDGED).

	Up to 12″	13″—24″	25″—36″	37″—48″	49″—60″	61″—72″
308 and 310 Quality ..	·0005″	·001″	·0015″	·002″	·0025″	·003″
309, 312 and 313 Quality	·0001″	·0002″	·0003″	·0004″	·0005″	·0006″

TOLERANCE FOR PARALLELISM OF EDGES WHERE **BOTH** EDGES ARE GROUND TO ABOVE LIMITS.

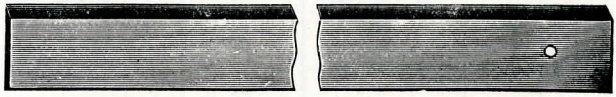
	Up to 12″	13″—24″	25″—36″	37″—48″	49″—60″	61″—72″
309, 312, 313 Quality ..	·0002″	·00025″	·0003″	·0004″	·0005″	·0006″
308, 310 Quality ..	·001″	·0015″	·002″	·0025″	·003″	·0035″

ENGINEERS' LIGHT STEEL STRAIGHT EDGES

WITH GLASS HARD EDGE

By a new process of hardening we are now able to deliver Straight Edges with a **Glass Hard Edge.** The Edge only is hardened, the body of the Straight Edge being left of its natural hardness. There is thus no danger of breakage, and the life of the tool is indefinitely prolonged.

NOTE.—These Straight Edges are not sold as parallels. If both edges are required accurate and parallel the price is increased 50 per cent.



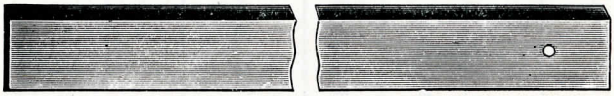
No. 312

Width and Thickness (approx.)	$1\frac{3}{4}'' \times \frac{1}{8}''$			$2'' \times \frac{3}{16}''$	
Length in inches	18	24	30	36	42
Plain, one bevel edge	8/3	9/6	12/6	15/–	18/6

Width and Thickness (approx.)	$2'' \times \frac{3}{16}''$	$3'' \times \frac{1}{4}''$	$3'' \times \frac{1}{4}''$
Length in inches	48	60	72
Plain, one bevel edge	21/–	30/–	40/– each

HEAVY STEEL STRAIGHT EDGES

WITH GLASS HARD EDGE



Finish ground all over.

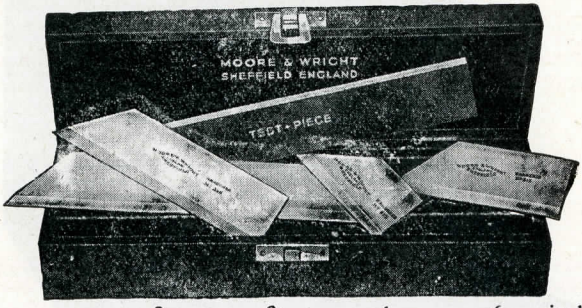
No. 313

Width and Thickness (approx.)	$2\frac{1}{2}'' \times \frac{1}{4}''$		$3'' \times \frac{5}{16}''$		$4'' \times \frac{1}{2}''$	
Length in inches	24	30	36	48	60	72
Plain, one bevel edge	20/–	30/–	35/–	55/–	70/–	90/– each

NEW TYPE TOOL MAKERS' STRAIGHT EDGES

No. 315

Size 1″ × ⅛″



2	3	4	6	inches
2/6	3/6	4/6	6/6	each

No. **315S** Set of four, i.e., one each 2, 3, 4, 6 inch and one black glass test piece 6½″ long, in plush lined Case.

Price .. **30/–** per Set.

No. **315TP** Black Glass Test Piece only, in Sliding Case.

Price .. **10/6** each.

We guarantee the error on these Straight Edges not to exceed .0001″ on any of the sizes. If a Straight Edge is held to the Black Glass Test Piece it should not show white light. Blue light is permissible, being within the limit.

MOUNT CUTTERS' STRAIGHT EDGES

For Mount Cutters, Tinsmiths, and wherever the highest precision is not required. They are rough ground all over.

One Bevel Edge angle about 40 degrees. Hole at one end.

No. **310** (approx.) 1¾″ × ⅛″

18	24
3/6	4/6

2″ × 3/16″

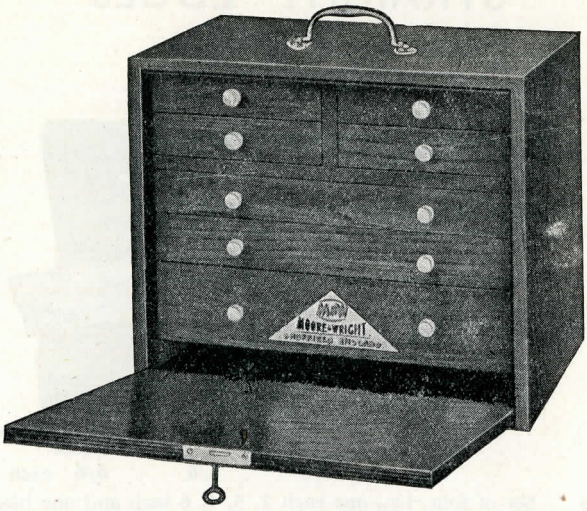
36	48
10/–	15/–

3″ × ¼″

60	72
20/–	25/–

Packed singly.

TOOLMAKERS CABINET



No. **1007**

DESCRIPTION—$10\frac{7}{16}$" high × $14\frac{5}{8}$" long × $7\frac{1}{2}$" back to front outside dimensions. This Case is constructed of $\frac{1}{2}$" solid oak with Yale lock and leather carrying handle. Four small drawers and 3 large drawers which will accommodate all the usual Toolmakers equipment such as Surface Gauge, Protractor, Combination Set, Micrometers, Callipers, Rules, Clamps, etc. The drawers are lined with green baize.

Beautifully finished Mid-Oak colour and polished.

Extremely strong, robust and durable.

Price **35/–** each.

PRECISION FEELER GAUGES

The Steel used in the manufacture of these Gauges has been chosen for its qualities of hardness, flexibility and endurance. The finished gauges consequently are hard and flexible and will maintain their size through years of continued use. The Steel possesses a great freedom from Rust, and while we do not offer the gauges as Stainless they will be found to possess a greater immunity from rusting than any previously offered.

We give a guarantee of unconditional reliability with every gauge marked "Moore & Wright." Facsimile below :—

GUARANTEE.

THIS is a "Moorite" **PRECISION** Feeler Gauge. The Blades have been properly hardened, ground and lapped to the correct size.

It is a Tool on which you can place the utmost reliance, and is the same as supplied to most Government Departments.

The Blades are made of a new Alloy Stee lof remarkable durability, which will retain their correct size after years of continual use, and while we do not offer them as Stainless, **they will remain more free from rust or tarnish than any steel ever used for this purpose.**

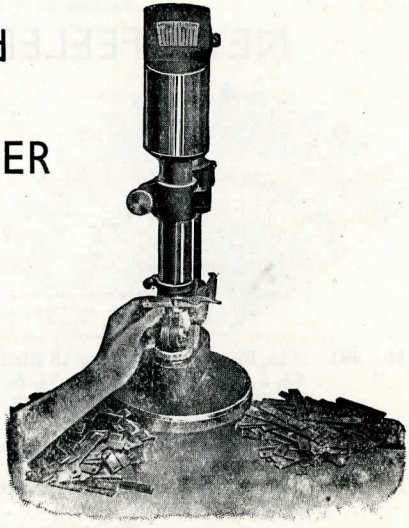
Please note that the Blades are contained in a hardened steel case which effectively prevents damage to the delicate Blades.

This Gauge is the result of 25 years' experiment and research, and is offered with confidence to the discriminate buyer who demands correct tools to work with.

MOORE & WRIGHT,
SHEFFIELD, ENGLAND.

THIS LABEL IS COPYRIGHT.

INSPECTION and CHECKING of PRECISION FEELER GAUGE BLADES



The instrument shown here reads accurately to 1/10,000 in. (one ten-thousandth) and is used in examination of all M. & W. Feeler Blades.

Every blade must pass the equivalent of the Air Ministry Test.

MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

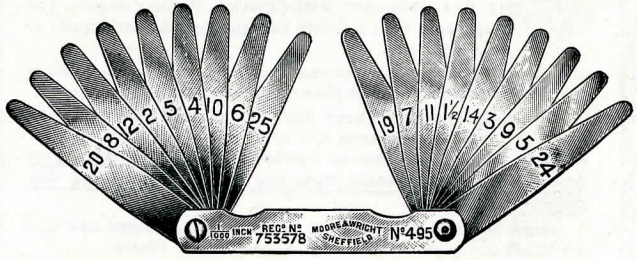
THE "FEELIMIT" GAUGE

NEW IDEA IN FEELER GAUGES

The Cases of these Feeler Gauges are now made of Stainless Steel. The Blades are made of Carbon Steel.

Regd. No. 753578

The arrangement of the blades in this gauge doubles the usefulness of feeler gauges. The blades at one end can be used as the "high" limit, and those at the other end as "low." Motor mechanics will find it especially useful, it abolishes guess work, as by using one gauge at each end definite tolerances can be worked to :—say a valve tappet is being set to 6/1000ths, draw out No. 6 blade at one end and No. 7 at the other, using No. 6 as "GO" and No. 7 as "NOT GO." Perfect exactitude of setting is thus obtained.



Containing 18 Blades, i.e., 9 at each end.

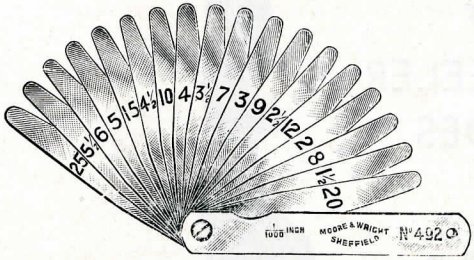
One end 2, 4, 6, 8, 10, 12, 15, 20, 25/1000ths of an inch.

Other end 1½, 3, 5, 7, 9, 11, 14, 19, 24/1000ths of an inch.

No. **494**	3 in. Parallel	5/- each.
No. **495**	3 in. Taper, as illustrated	5/6 „
No. **496**	4 in. Taper	6/6 „

Packed in ¼ dozens.

NEW FEELER GAUGES

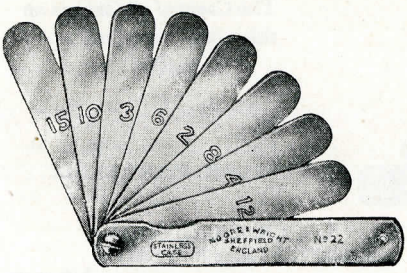


We introduce below the latest refinement in feeler gauges, i.e., a gauge giving every half - thousandth from 1½ to 6/1000, in addition to the usual sizes up to 25/1000. This gauge covers every need from rough measurement up to the most delicate refinement.

No. **491**	3 in. Parallel containing 18 Blades, i.e., one blade each 1½, 2, 2½, 3, 3½, 4, 4½, 5, 5½, 6, 7, 8, 9, 10, 12, 15, 20, 25/1000ths of an inch, each blade engraved with number	5/- each
No. **492**	3 in. Taper, containing Blades as above but tapered in width, exact as illustration	5/6 „
No. **493**	4 in. Taper as No. 492, but with all Blades 4 inches in length	6/6 „

Packed in ¼ dozens.

PRECISION FEELER GAUGES



The Cases of all Gauges on this page are made of Stainless Steel.

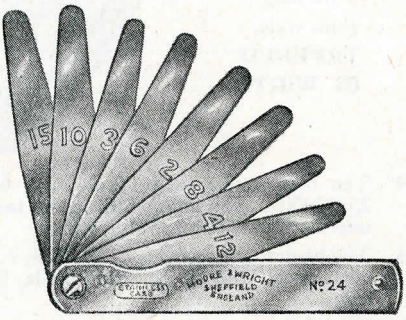
The Blades are made of Carbon Steel.

Blades, 3 in. long, ½ in. wide, **PARALLEL.**

No. 21	Six blades, viz. : one each 4, 6, 8, 10, 12, 15/1000ths of an inch, each marked with size, folding into steel case	2/– each
No. 22	Eight blades, viz. : one each 2, 3, 4, 6, 8, 10, 12, 15/1000ths of an inch, each marked with size, folding into steel case, as illustration	2/6 each
No. 27	Ten blades, as No. 22, but with two each 2/1000ths and 3/1000ths	3/6 each
No. 12	Twenty-two blades, one each 4 to 25/1000ths, rising by thousandths	8/6 each

For Gauges with extra long blades see pages 65, 70.

Blades.
3 in. long,
½ in. wide,
TAPERED IN WIDTH.



No. 23	Six blades, one blade each 4, 6, 8, 10, 12, 15/1000ths of an inch..	2/6 each
No. 24	Eight blades, as No. 22, but with blades exact as illustration	3/– each
No. 25	Ten blades, as No. 24, but with two each 2/1000ths and 3/1000ths blades	3/6 each
No. 28	Ten blades, as No. 24, but with three 2/1000ths blades	3/6 each

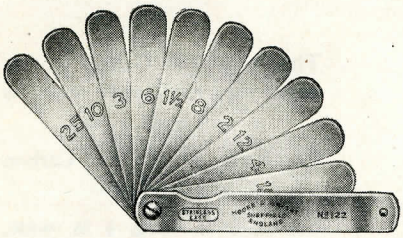
No. **170** **Bolts and Nuts** for Feeler Cases, 2/– doz.

LEATHER CASES for any of the above can be supplied at **5d.** each.

For "Safe and Sure" Feeler Gauges see pages 68, 69, 70.

For METRIC Feeler Gauges, see page 67.

PRECISION FEELER GAUGES



The Cases of all Gauges on this page are made of Stainless Steel.

Blades of Carbon Steel.

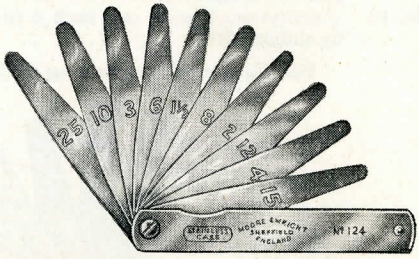
Blades, 3 in. long, ½ in. wide, **PARALLEL.**

No. 121 Ten blades, one each 1½, 2, 3, 4, 5, 6, 7, 8, 9, 10/1000ths of an inch, with size on each blade, folding into steel case .. .. **3/6** each

No. 122 Ten blades, one each 1½, 2, 3, 4, 6, 8, 10, 12, 15, 25/1000ths of an inch, with size on each blade, folding into steel case, exact as illustration .. .. .. **3/6** each

No. 128 Nine blades, one each 1½, 2, 3, 4, 6, 8, 10, 12, 15/1000ths .. .. **3/–** each

Blades,
3 in. long,
½ in. wide,
TAPERED IN WIDTH.



No. 124 Ten blades, one each 1½, 2, 3, 4, 6, 8, 10, 12, 15, 25/1000ths of an inch, with size on each blade, folding into steel case, exact as illustration .. .. .. **3/9** each

No. 125 Ten blades, one each 1½, 2, 3, 4, 5, 6, 7, 8, 9, 10/1000ths of an inch, with size on each blade, folding into steel case .. .. **3/9** each

No. 129 Nine blades, one each 1½, 2, 3, 4, 6, 8, 10, 12, 15/1000ths .. .. **3/3** each

LEATHER CASES for any of the above can be supplied at **5d.** each.

FEELER BLADES FOR REPLACEMENT

No. 171 3 in. parallel blades, Precision Quality .. .. **4d.** each

No. 172 3 in. taper blades, Precision Quality .. .. **5d.** each

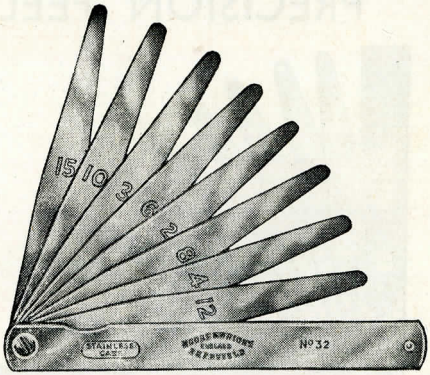
No. 173 4 in. taper blades, Precision Quality .. .. **6d.** each

For "Safe and Sure" Feeler Gauges see pages 68, 69, 70.

For METRIC Feeler Gauges, see page 67.

PRECISION FEELER GAUGES

Blades, 4 in. long, ½ in. wide,
TAPERED IN WIDTH.



No. **31** Six blades, one each of 4, 6, 8, 10, 12, 15/1000ths of an inch, with size on each blade, folding in steel case .. **2/6 each**

No. **32** Eight blades, as illustration, one blade each 2, 3, 4, 6, 8, 10, 12, 15/1000ths of an inch .. .. **3/6 each**

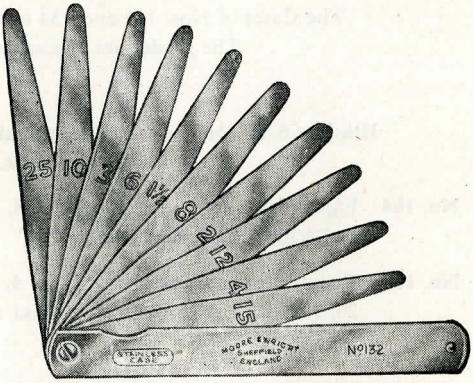
No. **36** Ten blades, three No. 2 blades and one each 3, 4, 6, 8, 10, 12, 15/1000ths of an inch .. .. **4/- each**

No. **33** Eight blades as No. 32, but fitted with 4 in. flexible steel rule .. .. **4/- each**

The Cases of all Gauges on this page are made of Stainless Steel.

The Blades are made of Carbon Steel.

Blades,
4 in. long,
½ in. wide,
TAPERED IN WIDTH.



No. **132** Ten blades, one each of 1½, 2, 3, 4, 6, 8, 10, 12, 15, 25/1000ths of an inch, with size on each blade, in steel case .. .. **4/- each**

No. **135** Ten blades, one each of 1½, 2, 3, 4, 5, 6, 7, 8 9, 10/1000ths of an inch, in steel case .. .. .. **4/- each**

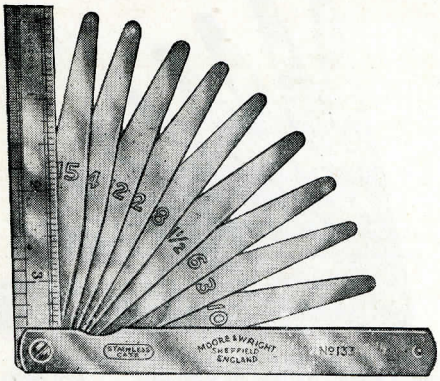
No. **130** Nine blades, one each 1½, 2, 3, 4, 6, 8, 10, 12, 15/1000ths **3/9 each**

LEATHER CASES for any of the above can be supplied at **6d.** each.

For "Safe and Sure" Feeler Gauges see pages 68, 69, 70.

For METRIC Feeler Gauges, see page 67.

PRECISION FEELER GAUGES



Blades, 4 in. long, ½ in. wide, **tapered in width,** fitted with flexible steel rule.

No. **133** Ten blades, one each of 1½, 2, 3, 4, 6, 8, 10, 12, 15, 25/1000ths of an inch, and fitted with steel rule, in steel case .. .. **5/-** each

No. **134** As No. 133, but with rule marked "London" and "Metric" .. .. **5/-** each

The Cases of Nos. 133 and 134 are of Stainless Steel.
The Blades are of Carbon Steel.

Blades, 6 in. long, ½ in. wide, **parallel,** fitted with 6 in. flexible steel rule.

No. **164** Eight blades, one each 2, 3, 4, 6, 8, 10, 12, 15/1000ths and 6 in. flexible steel rule .. .. **8/-** each

No. **165** Ten blades, one each 1½, 2, 3, 4, 6, 8, 10, 12, 15, 25/1000ths and 6 in. flexible steel rule .. .. **9/-** each

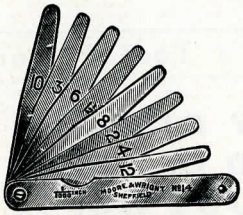
Blades, 6 in. long, ½ in. wide, **tapered in width,** fitted with 6 in. flexible steel rule.

No. **166** Eight blades, one each 2, 3, 4, 6, 8, 10, 12, 15/1000ths and 6 in. flexible steel rule .. .. **8/6** each

No. **167** Ten blades, one each 1½, 2, 3, 4, 6, 8, 10, 12, 15, 25/1000ths and 6 in. flexible steel rule .. .. **9/6** each

For "Safe and Sure" Feeler Gauges see pages 68, 69, 70.

VEST POCKET FEELER GAUGE



Nut and Screw Joint

Blades, 3 in. long, ⅜ in. wide, tapered in width.

No. 14 Eight blades, i.e., one each 1½, 2, 3, 4, 6, 8, 10, 12, in special light case for vest pocket. A very handy and attractive article .. .. **2/6** each

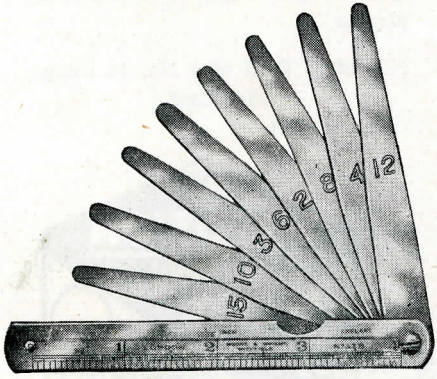
No. 14RF As above, but with rule and file for magneto .. .. .. **3/9** each

LEATHER CASES for any of the above can be supplied at **5d.** each.

If you want a Cheaper Gauge we make a range marked "SAFE AND SURE" SHEFFIELD, pages 68, 69, 70.

Packed in ½ dozens.

RULED CASE FEELER GAUGE



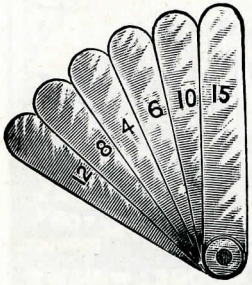
Blades, 4 in. long, ½ in. wide, tapered in width.

No. 32B Eight blades, one each 2, 3, 4, 6, 8, 10, 12, 15/1000ths of an inch, exact as illustration, with rule marked on case **4/–** each

No. 132B Ten blades, one each of 1½, 2, 3, 4, 6, 8, 10, 12, 15, 25/1000ths of an inch, engraved with size on each, with rule marked on case .. .. .. **4/6** each

POCKET FEELER GAUGE

WITHOUT CASE



These are now made with Nut and Screw Joint.

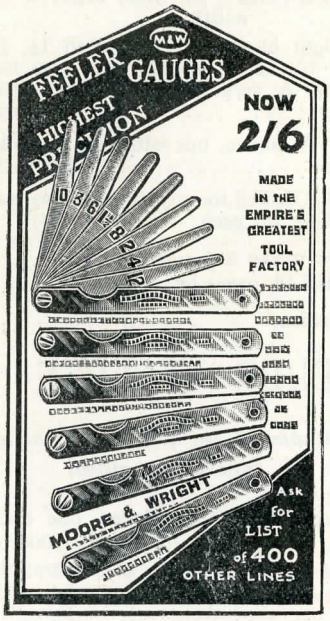
No. 2 Six blades, 3 in. long, ½ in. wide; one of each 4, 6, 8, 10, 12, 15/1000ths of an inch, without steel case, as shown, **10d.** each.

No. 4 Eight blades, viz.: one each 2, 3, 4, 6, 8, 10, 12 and 15/1000ths of an inch, **1/2** each.

No. 5 Six blades, viz.: one each 2, 3, 4, 5, 10, 15/1000ths of an inch .. **1/–** each.

All above packed in ½ dozens.

PRECISION FEELER GAUGES



PRECISION FEELER GAUGES

FEELER GAUGES

MARKED

"MOORE & WRIGHT"

Are the World's Finest Production for

ACCURACY & FINISH

With every order for Feeler Gauges at least one is mounted on an attractive card as shown, free of charge.

These cards have been specially designed and show the goods to great advantage.

Britain's Tool Factory

NEW DISPLAY CARD OF FEELER GAUGE No. 14

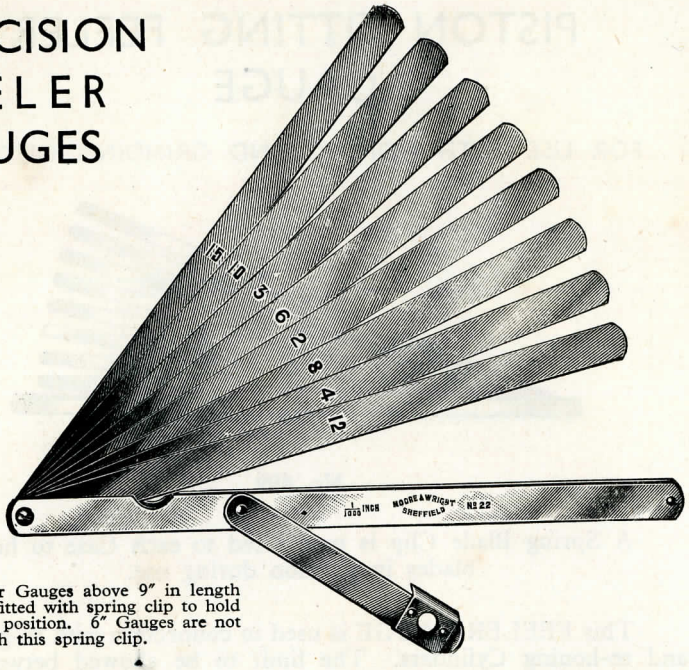
Spare Blades can always be obtained. Accurate to Finest Government Limits. This Card enables you to show our No. 14 Feeler to advantage.

Because of its small bulk, its accuracy and its light weight it is immensely popular.

No. 14A Card of 6 No. 14 Gauges 15/- Card.

(See page 63).

PRECISION FEELER GAUGES



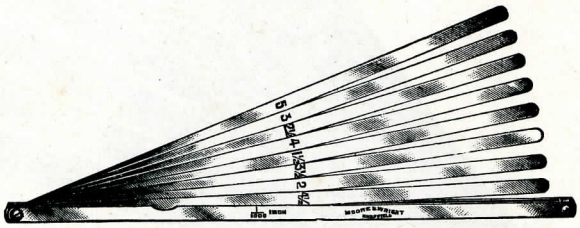
All Feeler Gauges above 9″ in length are now fitted with spring clip to hold blades in position. 6″ Gauges are not fitted with this spring clip.

		6″	9″	12″	15″	18″	24″	
Blades, ½ in. wide, parallel.								
No. 21	Six blades, viz.: one each 4, 6, 8, 10, 12, 15/1000ths of an inch, each marked with size, folding into steel case as illustration	6/–	7/6	9/–	10/6	12/6	16/6	each
No. 22	Eight blades, viz.: one each 2, 3, 4, 6, 8, 10, 12, 15/1000ths of an inch, each marked with size, folding into steel case ..	7/–	9/–	10/6	12/6	15/–	18/6	„
No. 122	Ten blades, viz.: one each 1½, 2, 3, 4, 6, 8, 10, 12, 15, 25/1000ths	8/–	11/–	12/6	14/6	18/–	22/6	„
Blades, ½ in. wide, tapered in width.								
No. 23	Six blades, one blade each 4, 6, 8, 10, 12, 15/1000ths of an inch	6/6	8/–	9/9	11/6	14/–	18/–	„
No. 24	Eight blades, sizes as illustration	7/6	9/6	11/3	13/6	16/–	20/–	„
No. 124	Ten blades, viz.: one each 1½, 2, 3, 4, 6, 8, 10, 12, 15, 25/1000ths	8/6	11/6	13/6	15/6	19/–	23/6	„

QUOTATIONS given for Special Feeler Gauges on application.

PISTON FITTING FEELER GAUGE

FOR USE WITH HONING AND GRINDING OUTFITS.



No. 499

A Spring Blade Clip is now fitted to each Case to hold blades in position during use.

This FEELER GAUGE is used in connection with re-grinding and re-honing Cylinders. The limit to be allowed between the size of the Piston and the bore of the Cylinder is :—

For Aluminium Pistons, up to 3 in. dia., $1\frac{1}{2}$/1000 in. per in. of dia.
For do. over 3 in. dia., $1\frac{3}{4}$/1000 in. „ „
For Cast Iron Pistons, for all sizes, 1/1000 in. per in. of diameter.

For example, a 3 in. Cylinder would have an allowance of .0045 in. The Feeler Blade marked $4\frac{1}{2}$, when put down the side of the Cylinder, should be just enough to hold the Piston in position. When the Feeler Blade is drawn out, the Piston should just slide down. Where an odd $\frac{1}{4}$/1000 in. enters into the calculation, it can be ignored.

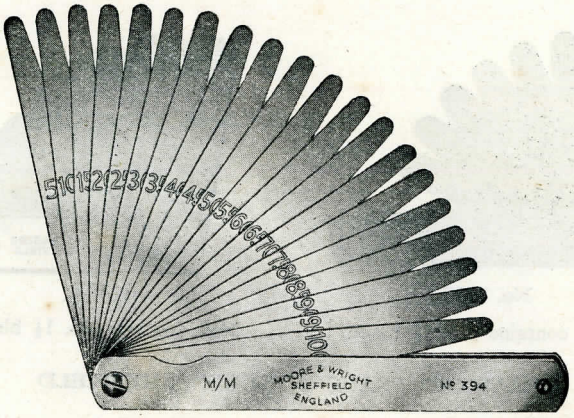
Working on this formula gives a perfect job.

The Feeler Gauge contains Blades to obtain thicknesses of every half-thousandth, from .0015 in. to .005 in. If larger sizes are required two blades can be used together.

No. 499 Containing 8 blades, 10 in. by $\frac{1}{4}$ in. one blade each, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4, $4\frac{1}{2}$, 5/1000ths of an inch in Steel Case. **10/- each**

Packed one in a box.

METRIC FEELER GAUGES



No. 391 With ten blades, 3″ long, tapered, i.e., one each 5, 10, 15, 20, 30, 40, 50, 60, 70, 80/100 m/m.. 2/– each

No. 392 Ditto but with blades 4″ long .. .. .. **2/6** each

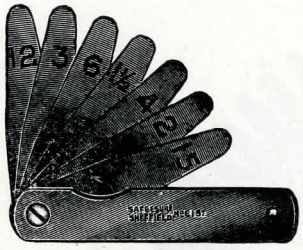
No. 393 With twenty blades, 3″ long, tapered, i.e., one each 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100/100 m/m .. **4/–** each

No. 394 Ditto but with blades 4″ long .. .. .. **5/–** each

Cheap Lines of FEELER GAUGES

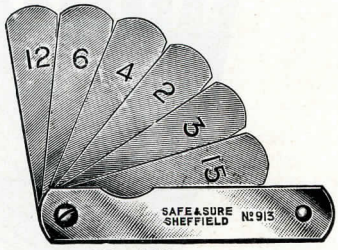
As there is a call for a cheap Feeler Gauge on the part of Motorists, etc., we meet the demand by offering the lines given below.

Nothing so low in price has ever been offered before.



No. 913T

Now contains No. 1½ blade.



No. 913

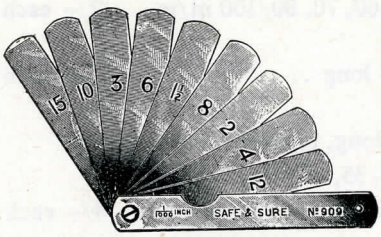
Now contains No. 1½ blade.

MARKED "SAFE & SURE" SHEFFIELD

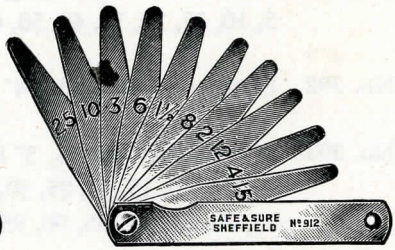
No. **913** 7 blades 2¼ in. long, parallel, one each 1½, 2, 3, 4, 6, 12, 15/1000ths .. .. **10d.** each

No. **913T** As illustration .. .. **1/–** each

No. **909** NINE PARALLEL BLADES, 3 in. long 1½, 2, 3, 4, 6, 8, 10, 12, 15/1000ths .. .. **1/3** each



No. **909**



Nos. **911** and **912**

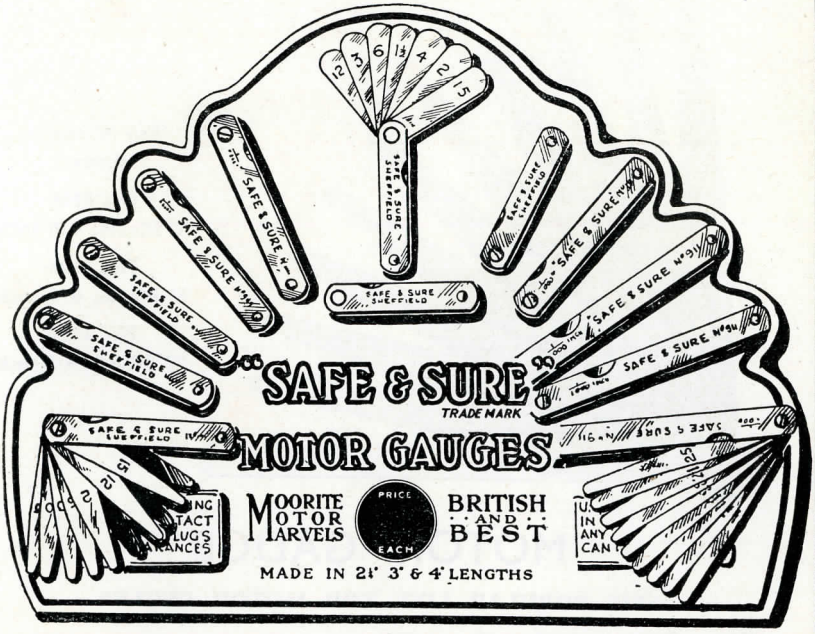
No. **912** TEN TAPERED BLADES, 3 in. long, 1½, 2, 3, 4, 6, 8, 10, 12, 15, 25/1000ths, as illustration .. .. **1/9** each

No. **911** TEN TAPERED BLADES, 4 in. long, 1½, 2, 3, 4, 6, 8, 10, 12, 15, 25/1000ths .. .. **2/–** each

No. **911R** As No. 911 but with flexible Rule .. .. .. **2/9** each

CHEAP LINES of FEELER GAUGES

ON CARDS



The above illustration shows the cheap and popular line of Feeler Gauges, "Safe and Sure" Brand, mounted on attractive cards. A variety of assortments is offered below :—

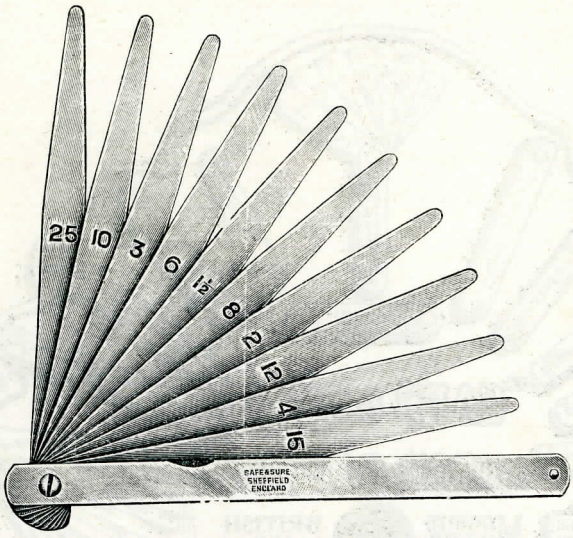
Card No. **923**	Contains one dozen of 2¼ in. gauges, No. 913	**10/9** per card
„ **923T**	„ 2¼ in. „ No. 913T	**12/9** per card
„ **919**	Contains one dozen of 3 in. parallel blade gauges No. 909..	**15/9** per card
„ **922**	Contains one dozen of 3 in. tapered blade gauges No. 912	**21/9** per card
„ **921**	Contains one dozen of 4 in. tapered blade gauges No. 911	**24/9** per card
„ **924**	Contains ¼ dozen of each Nos. 913, 909, 912, and 911	**18/3** per card

Our Carded Goods will brighten up your shop and increase your turnover.

MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

"SAFE & SURE" FEELER GAUGES

IN LARGE SIZES



Ten Blades as shown.

No. 1106
6″ Blades, 4/6 each

No. 1109
9″ Blades, 6/6 each

No. 1112
12″ Blades, 8/6 each

MOTOR GAUGE

NEW POPULAR LINE FOR MOTOR CYCLES

This Gauge contains 6 blades, as follows :—

3 inches long

No. 12 for Magneto, contact breaker.
„ 4 „ Side Valve Inlet.
„ 6 „ „ Exhaust.
„ 25 „ Plugs.
„ 2½ „ Overhead Valve Tappets.
„ 15 „ Coil.

The above is indelibly stamped on each Gauge.

For Contact breaker coil ignition use Nos. 12 and 4 together.

No. **914** .. 1/3 each

"Safe & Sure" Quality.

Untouchable for Price.

Packed in half dozens

We are the ACTUAL MAKERS, and only our remarkably efficient means of production enables us to offer at the above prices.

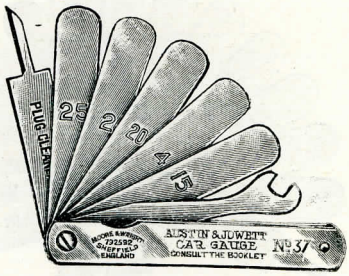
MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

No. 37. AUSTIN AND JOWETT CAR GAUGE

Reg. No. 792592

Contains one blade 3″ long, each 2, 4, 15, 20, 25, plug cleaner and magneto spanner suitable for all models.

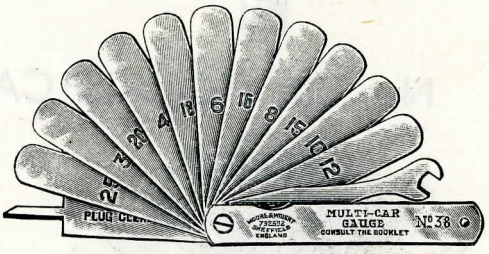
Price 2/– each.



No. 38. MULTI-CAR GAUGE

Contains one blade 3″ long each 3, 4, 6, 8, 10, 12, 15, 16, 18, 20, 25, plug cleaner and magneto spanner covers all models of the following cars : — Alvis, Crossley, M.G., Talbot, Humber, Rover, Standard, Sunbeam, Triumph, Vauxhall, Riley, Wolseley, Singer.

Price 3/9 each.

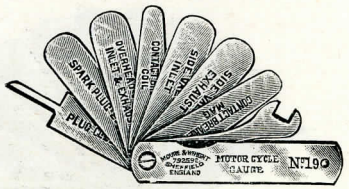


No. 19. MOTOR CYCLE GAUGE

Contains one blade each 2¼″ long. This Gauge contains gauges for correctly setting—

Spark Gap, **25.**
Contact Breaker Coil, **15.**
Contact Breaker Mag., **12.**
Inlet Valves on Side Valve Engines, **4.**
Exhaust Valves on Side Valve Engines, **6.**
Inlet and Exhaust on Overhead Valve Engines, 2½.
Plug cleaner and magneto spanner.
As illustrated.

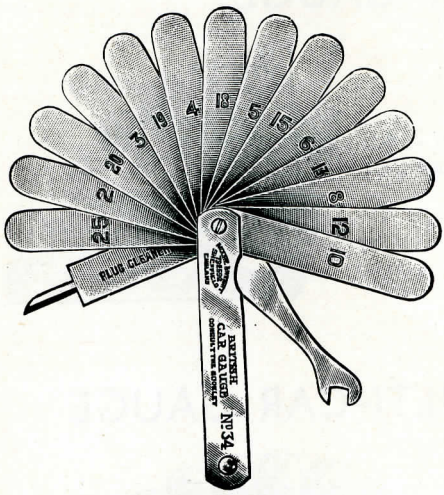
Price 2/3 each.



MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

No. 34. BRITISH CAR GAUGE

Reg. No. 792592

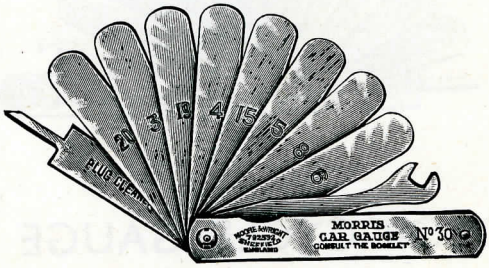


Contains Gauges for all the settings on all British cars, tappets, magneto or distributor points, spark plugs. Plug cleaner and magneto spanner also included in the set. In the few cases where there is no blade of the thickness required, two blades can be used together to obtain the exact thickness necessary.

This Gauge contains one 3″ blade each 2, 3, 4, 5, 6, 8, 10, 12, 13, 15, 18, 19, 20, 25 thousandths, plug cleaner and magneto spanner.
Ideal for the garage and repair-man.

Price .. 4/3 each.

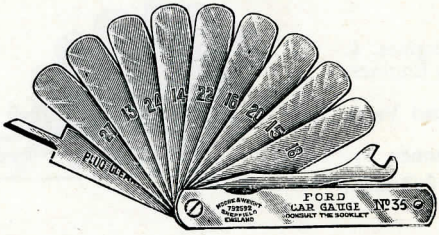
No. 30. MORRIS CAR GAUGE



Contains one blade 3″ long each 3, 4, 5, 6, 8, 15, 19, 20, plug cleaner and magneto spanner. This Gauge is right for all models Morris & Cowley from 1929.

Price 3/3 each.

No. 35. FORD CAR GAUGE



Contains one blade 3″ long each 13, 14, 15, 16, 18, 20, 22, 24, 27, plug cleaner and magneto spanner. Covers all models.

Price 3/3 each.

● MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

IF ADJUSTED WITH THE RIGHT GAUGE —
YOUR CAR WILL RUN BETTER
—MORE SILENTLY AND ECONOMICALLY
№30 FOR ALL MORRIS CARS
№37 FOR ALL AUSTIN JOWETT CARS
№38 FOR ALL AUSTY-CROSSLEY MOTALBOT-HUMBER ROVER-STANDARD SUNBEAM-TRIUMPH-VAUXHALL WILLY WOOLSELEY-SINGER CARS
A COPY OF THIS VALUABLE BOOKLET FREE WITH EACH GAUGE
№35 FOR ALL FORD CARS
№34 FOR ALL BRITISH CARS
MOORE & WRIGHT (SHEFFIELD) LTD ENGLAND

CARD OF QUALITY ENGINEERS' KNIVES

No. **162**

1 Card of 3 Knives, one each Nos. 137, 138, 141, see page 74.

Price .. **17/6**

No. **163**

1 Card of 3 Knives, one each Nos. 137, 151, 141, see pages 74 and 75.

Price .. **17/6**

Cards No. 140 and 140A are now abandoned.

Any other assortment can be made up at proportionate prices.

These are Knives and Gauges of highest quality.

CARD OF NEW MOTOR GAUGES

No. **39**

This Card exhibits the most popular Motor Gauges ever introduced.

There is a Gauge for every size on your Car.

No. **39**

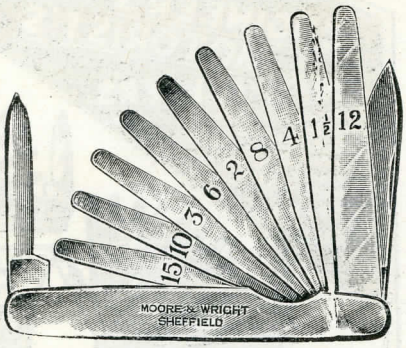
Card of 5 assorted Gauges.

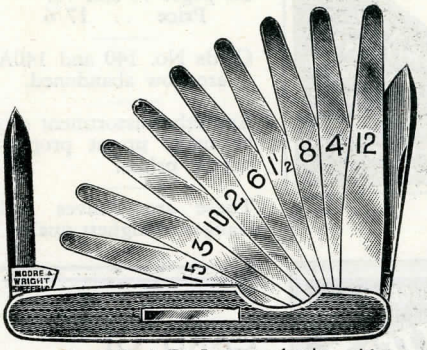
Price .. **16/6** per Card.

ENGINEERS' PEN KNIVES

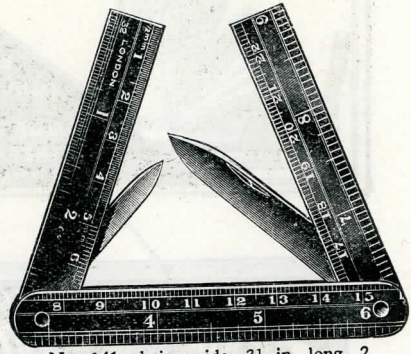
No 137 The illustration shows an Engineer's Pen Knife, with German Silver handle, 3½ ins. long, containing 9 feeler gauge blades ranging from 1½ to 15/1000ths of an inch, and two hand-forged blades. It is a size convenient and handy for the pocket, length 3½ inches .. .. 5/- each

No. 137S as above but with stainless handles and knife blades; feeler blades are ordinary steel .. .. 6/6 each



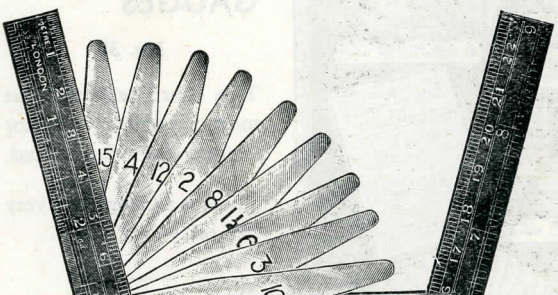


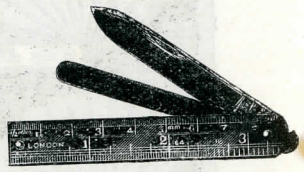
No. 138 A De Luxe production with beautiful engine-turned scales, hand-forged hand-fitted blades. A super excellent job .. .. 7/6 each



No. 141 ½ in. wide, 3½ in. long, 2 blades, 9 in. folding rule .. 4/6 each

No. 141S All stainless, only ⅜ in. wide. 6/- each





No. 143 Very useful for Motorists. It contains a hand-forged blade, a magneto file, and the case is formed of a 3½ in. rule, left with a square end so that measurements can be taken from corners, etc., etc. 3/- each

No. 136 Feeler Gauge with 9 blades, the handle with folding blades forming rule 9 ins. long Blades 3 in. × ½ in. tapered .. .. .. 4/6 each.

Packed in ¼ dozens.

MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

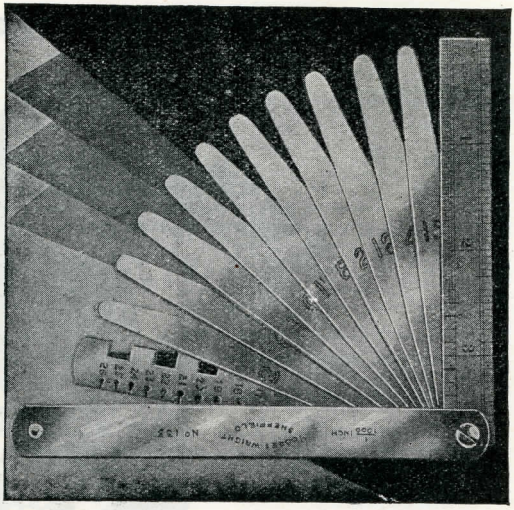
TWO NEW COMBINATION GAUGES

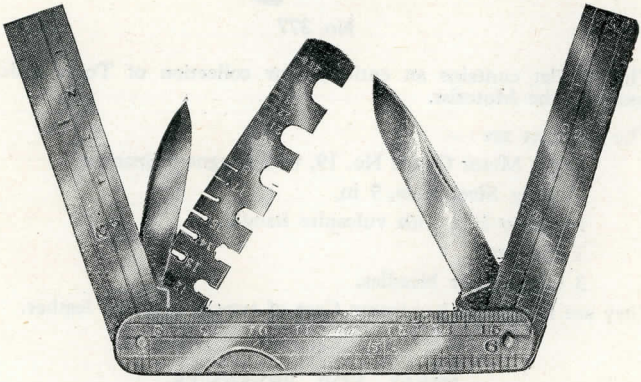
No. **131** This is a new combination of Feeler and Wire Gauges and a Flexible Rule.

The Wire Gauge is I.S.W.G. from 4-26.

The Feelers are 4 in. long and are from 1½ to 25/1000ths and the Rule is 4 in. flexible.

Price .. **7/6** each





No. **151** This combination consists of 9 in. Folding Rule, 2 Knife Blades, and a Wire Gauge from 4-26 I.S.W.G.

Price .. **7/6** each

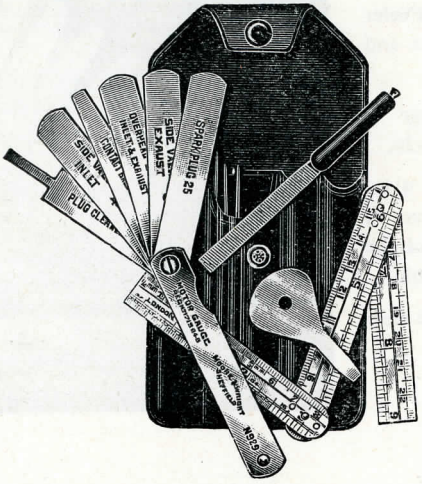
Packed in ¼ dozens

MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

MOTOR CYCLISTS' WALLET

IDEAL FOR PRESENTATION

DESIGNED FOR COMPACTNESS



No. **377**

This Wallet contains an entirely new collection of Tools which are necessary to the Motorist.

The contents are :—

Regd. Motor Gauge No. 19, with Magneto Spanner.
Folding Steel Rule, 9 in.
Magneto File with vulcanite handle.
Turnscrew.
3 Carburettor Needles.

They are fitted in a handsome Case of superb morocco leather.

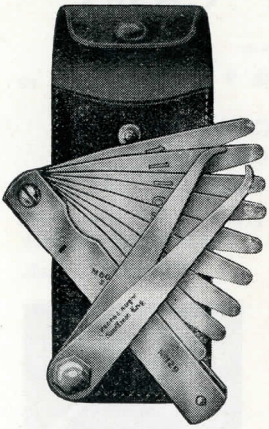
IDEAL FOR PRESENTS

Price .. **5/6** each

Packed singly

● MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

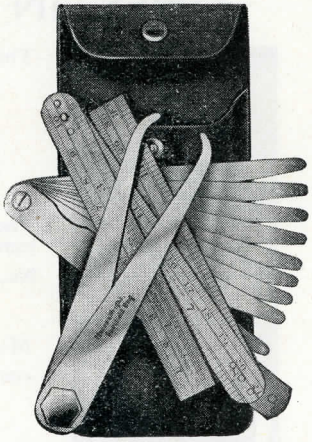
TOOLS IN POCKET CASES



No. **370** 2 Piece.
3 in. Feeler Gauge,
No. 129, 9 blades.
3 in. Calliper,
No. 330.
As illustration.
5/– each.

No. **371.**
4 in. Feeler Gauge,
No. 130, 9 blades.
4 in. Calliper,
No. 330.
5/6 each.

No. **372** 3 Piece.
3 in. Feeler Gauge,
9 blades, No. 129.
3 in. Calliper,
No. 330.
9 in. Rule, 3 fold.
7/– each.



No. **373.** 4 in. Feeler Gauge, 9 blades, No. 130. 4 in. Calliper, No. 330. 12 in. Rule, 3 fold .. **7/9** each.

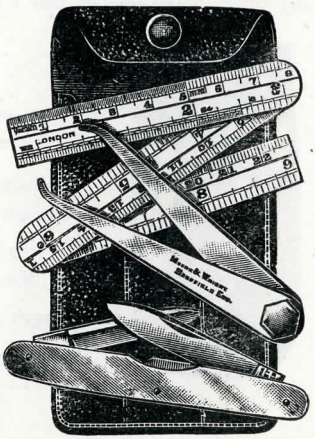
The Tools in these wallets can be varied to suit customers' requirements.

Special Quotations for large Quantities.

Many of these articles can be supplied in Stainless.

Particulars on application.

POCKET CASES containing POCKET KNIVES AND VARIOUS TOOLS



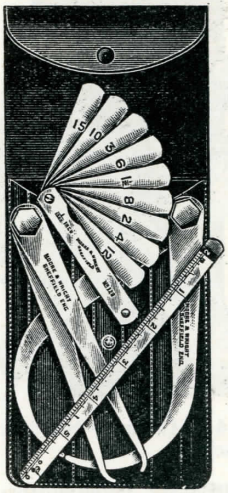
No. **370K** Containing—
2 Blade Pocket Knife and 3 in. Calliper **3/9**

No. **372K** Containing—
2 Blade Knife, 3 in. Feeler Gauge, 3 in. Calliper **7/–**

No. **382K** Containing—
2 Blade Knife, 9 in. Folding Rule, 3 in. Calliper **5/3**

The Tools in the Wallets can be varied as required.

POPULAR LINES IN POCKET CASES



No. 375

This Case is fitted with:—

1 Feeler Gauge with 9 blades from 1½ to 15/1000ths.

1 Inside firm joint Calliper, 6 in.

1 Outside firm joint Calliper, 6 in.

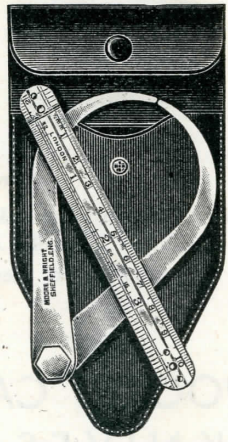
1 Steel Rule, 12 in., 2-fold.

The Case is of highest grade leather with press button, and the whole set is very neat and compact

No. 375 .. .. Price 9/- each.

Many of these articles can be supplied in Stainless.

Particulars on application.

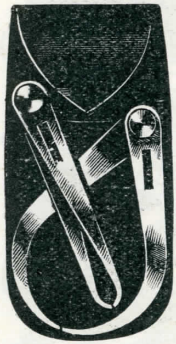


This Case of Calliper and Rule is a very neat Set at a low cost.

No. 376 With 4 in. Outside Calliper and 9 in. 3-fold rule .. .. .. 3/6 each

No. 378 With 6 in. Outside Calliper and 12 in. 3-fold rule .. .. .. 5/- each

Many other variations of this Case can be made.



No. 379

CASE OF POCKET CALLIPERS

Produced purposely to carry in the pocket. Ideally compact and superlatively useful. For presentation or sale, a splendid line.

No. 379 Price .. 1/6 per Case.

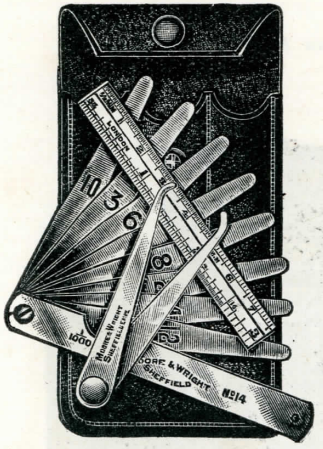
Length of Callipers 2¼ in. **"The Mighty Mites."**

Loose Callipers—

No. 300 Inside ..
No. 301 Outside .. } 7d. each.

POCKET CASE

FOR ENGINEERS AND MOTORISTS



No. **380**

This illustration shows the neatest and most likeable case ever introduced. No other case ever lay so flat and unnoticed in the pocket. It contains a 3 in. rule, a No. 14 feeler gauge with 8 blades, and a 2¼ in. calliper, all of the M. & W. quality.

No. **380** as illustrated and described.
5/- each.

Make Splendid Presents.

Packed singly.

KNIFE AND GAUGES

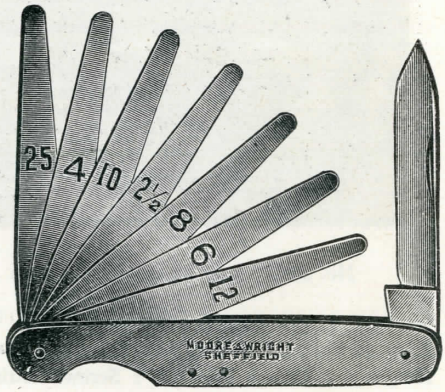
FOR ENGINEERS AND MOTORISTS

This is a new line containing a knife blade and 7 gauges from 2½ to 25 for all the settings on your car. Each Gauge is indelibly engraved with its size.

No. **397.** With 1 Gauge each 2½, 4, 6, 8, 10, 12, 25/1000ths and hand forged knife blade. Length 3½ inches.

Price **3/9** each.

Packed in ½ dozens.



No. **397**

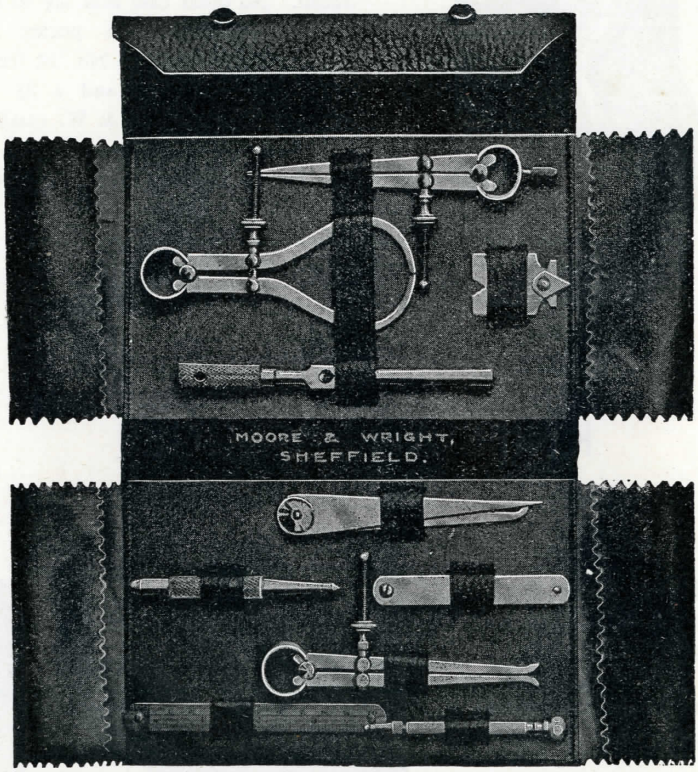
MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

SETS OF TOOLS

IN FOLDING LEATHER CASE

These Cases are ideal for School or Apprentices' Prizes.

No. 374



No. 374 Case complete as shown 24/–

Contains 1 each Spring Divider, 4 in.; 1 Outside Spring Calliper, 4 in.; 1 Inside Spring Calliper, 4 in.; 1 Firm Joint Jenny Calliper, 4 in.; 1 Tap Holder; 1 Centre Punch; 1 Screw Cutting Gauge; 1 Feeler Gauge, 8 blade; 1 Rule, 12 in.; 1 Pocket Scriber.

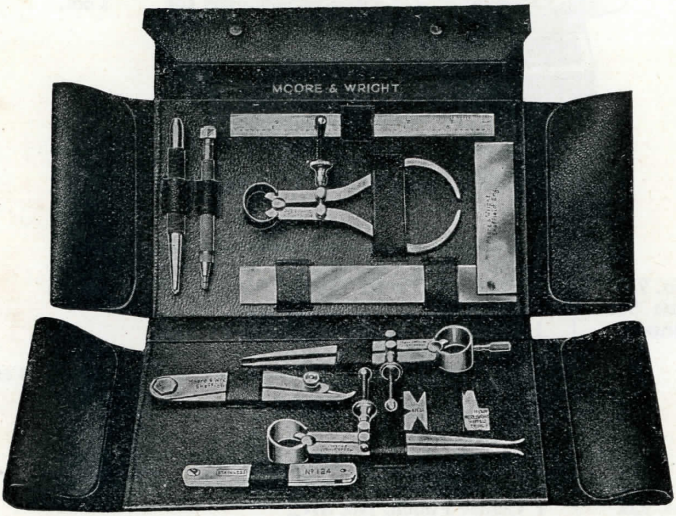
MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

SETS OF TOOLS

IN FOLDING LEATHER CASE

These Cases make splendid gifts, presentations, prizes, etc.

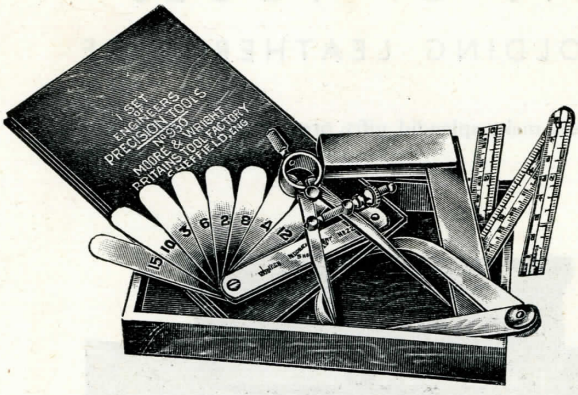
No. **384**



No. **384** Case complete as shown 26/–

Contains 1 Spring Divider, 4 in.; 1 Outside Spring Calliper, 4 in.; 1 Inside Spring Calliper, 4 in.; 1 F.J. Jenny Calliper with adjustable point, 4 in.; 1 Engineer's Square, 5 in.; 1 Pocket Scriber; 1 Centre Punch; 1 Precision Feeler Gauge, 8 blades; 1 Screw-cutting Gauge; and 1 Rule, 6 in., marked 1/8ths, 1/16ths, 1/32nds, 1/64ths.

SETS OF TOOLS



These Sets are now put up in polished boxes with hinged lids and with separate slots for each Tool.

MAKE EXCELLENT PRESENTS

No. 930 This Set contains

1 Outside Calliper Firm Joint, No. **331**, 4 in.
1 Pair Spring Dividers, No. **50**, 3 in.
1 Precision Feeler Gauge, No. **22**, Eight blades from .002 to .015
1 Precision Try Square, No. **400**, 3 in.
1 Rule, 3 fold, 9 in.
1 Box with Hinged Lid

10/6 each

No. 931 This Set contains

1 Precision Feeler Gauge, No. **22**, with 8 blades from .002 to .015
1 Centre Punch, No. **81C**.
1 Outside Firm Joint Calliper, No. **331**, 3 in.
1 Inside Firm Joint Calliper, No. **330**, 3 in.
1 Precision Try Square, No. **400**, 3 in.
1 Box with Hinged Lid.

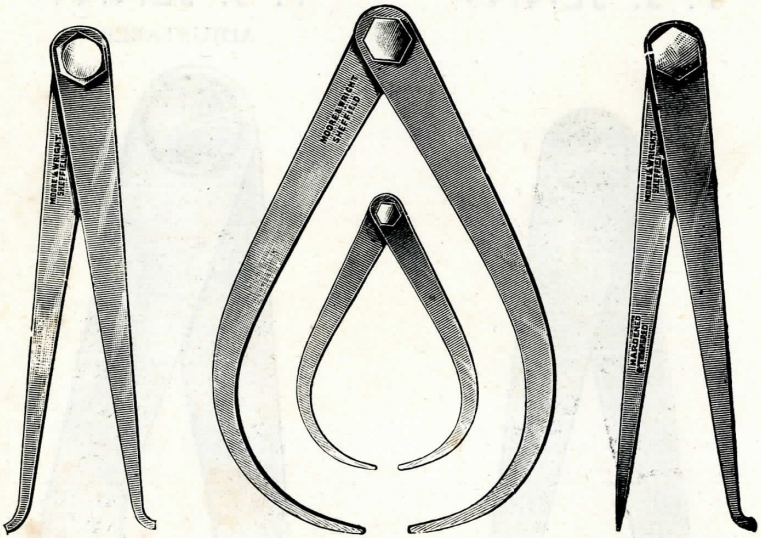
8/– each

No. 932 This Set contains

1 Outside Firm Joint Calliper, No. **331**, 4 in.
1 Inside Firm Joint Calliper, No. **330**, 3 in.
1 Centre Punch, No. **81C**.
1 Precision Feeler Gauge, No. **22**, Eight blades from .002 to .015
1 Box with Hinged Lid

5/6 each

FIRM JOINT CALLIPERS



Inside, No. 330 Outside, No. 331 Jenny, No. 332

These Callipers are **Stiffer** and more **Rigid** than any on the market. The nuts forming the joint are **Thoroughly Hardened,** rendering the joint smooth and even in tension, and practically doubling the life of the Callipers.

Hexagon Headed Nuts on all sizes

F.J. Callipers will measure approximately one-third greater than their nominal size.

Points not hardened but specially stiffened to resist wear.

Joints of Steel with a Velvet Feel

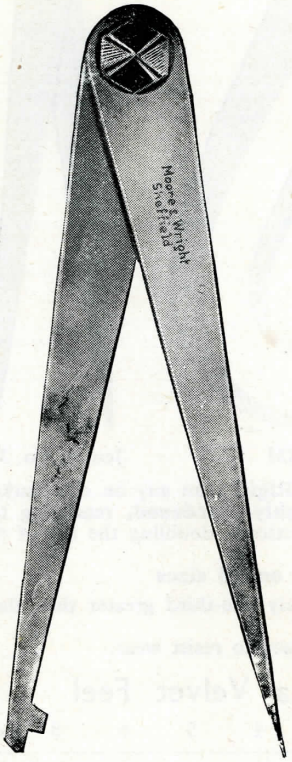
	length			3	4	5	6	8	inch.
No. 330 Inside	price			9d.	10½d.	1/–	1/3	2/3	pair.
No. 331 Outside	length	10	12	15	18	24	30	36	inch.
	price	4/–	4/6	6/6	8/6	15/–	30/–	37/6	pair.

No. 332 Jenny	4	5	6	inch.
	1/–	1/3	1/6	pair.

Nuts and Bolts for Firm Joint Callipers

No. 174 Up to	4	5	6	8	10	12	18	24	inch.
	6d.	7d.	7d.	8d.	10d.	1/–	1/4	1/8	pair.

NEW F. J. JENNY



No. **342**

WITH SOLID POINT

This "positive" feature improves this tool 100 per cent.

No. **342**

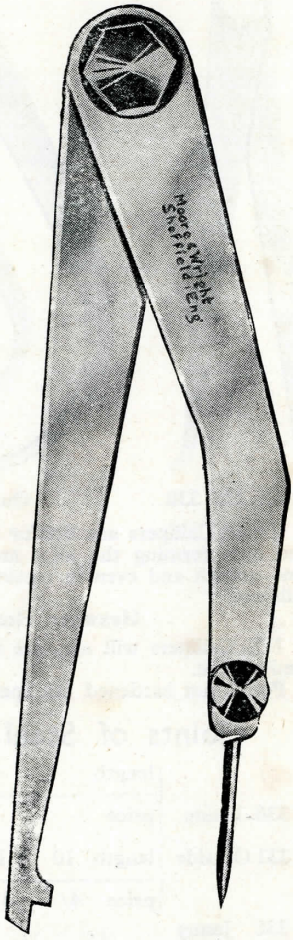
5 inch, 1/6 per Pair

One size only

Packed in ¼ dozens

NEW F. J. JENNY

ADJUSTABLE



No. **341**

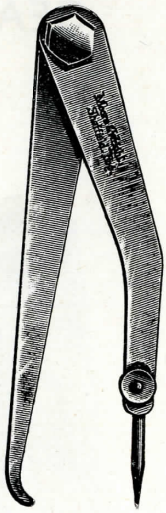
The "positive" feature registers a great advance over the old type. All uncertainty when scribing off shoulders completely abolished.

No. **341**

One size only, 5 in.,

3/– per Pair

FIRM JOINT JENNY CALLIPERS



This Calliper has an adjustable point, as well as improved firm joint with hardened nuts. The joint is smooth and even in tension, and the points can be renewed for a trifling sum when necessary.

No. **336** ..	4 inch	**2/6**	pair.
	5 inch	**2/9**	„
	6 inch	**3/3**	„
No. **339**	Loose points for No. 336 ..	**2d.**	each.
No. **175**	Nuts and Screws for No. 336 points..	**6d.**	pair.

Packed in ½ dozens.

POCKET CALLIPER

No. **338**

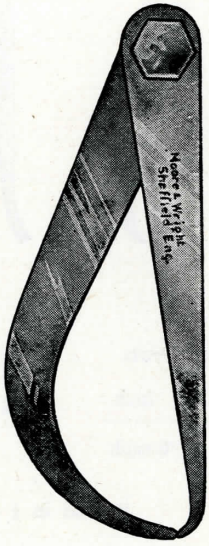
This is a most useful Calliper to carry in the pocket. For a small tool it has a wide range of both inside and outside measurements.

No. **338**

3¼	4 inch
1/–	1/3 each

Packed in ½ dozens.

TUBE CALLIPER



No. **344**

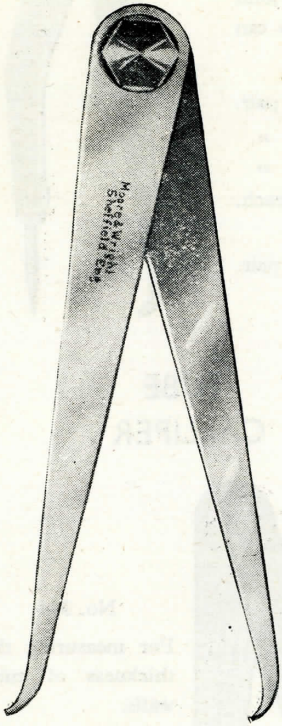
No. **344**

For measuring the thickness of tube walls.

3	4 inch
10d.	1/– each
5	6 inch
1/3	1/6 each

Packed in ¼ dozens.

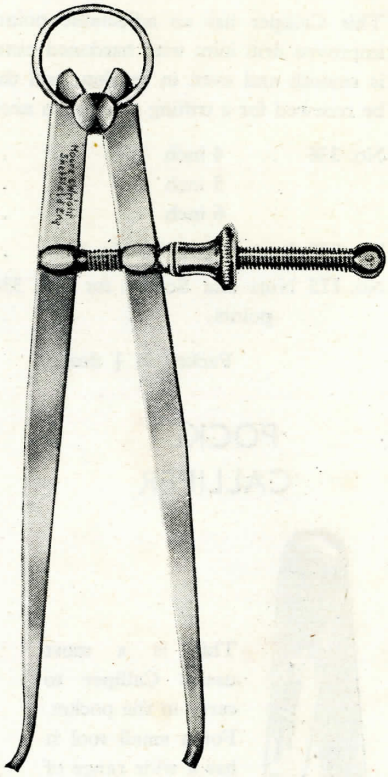
GEAR TOOTH CALLIPERS



No. 343

Firm Joint type, as shown.

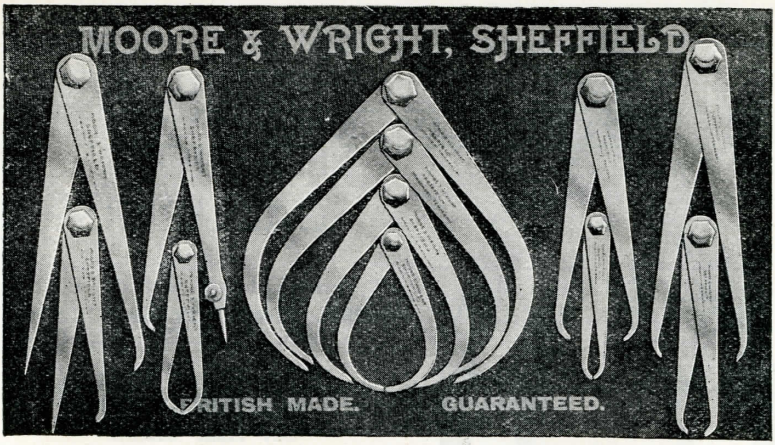
3	4	5	6 inch
10d.	**1/–**	**1/3**	**1/6 each**



No. 58

3	4	5	6 inch
1/9	**2/–**	**2/3**	**2/6 each**

Packed in ¼ dozens

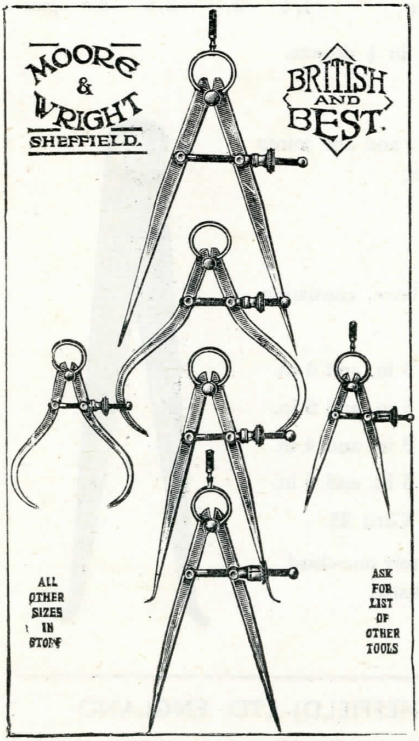


New Assortment, including latest pattern Jenny

No. **365**

This Card contains 1 Firm Joint Outside Calliper, No. 331, each 3, 4, 5, 6 ins.
1 „ „ Inside „ No. 330, each 3, 4, 5, 6 ins.
1 „ „ Jenny „ No. 332, 4 ins.
1 „ „ „ „ No. 336, 5 ins.
1 „ „ Pocket „ No. 338, 3¼ ins.
1 „ „ New Jenny „ No. 341, 5 ins.

Price .. **16**/– per Card.



No. **366**

This Card contains an assortment of 6 good selling lines of Spring Dividers and Callipers as listed on page 89. Details below.

IDEAL FOR WINDOW DISPLAY

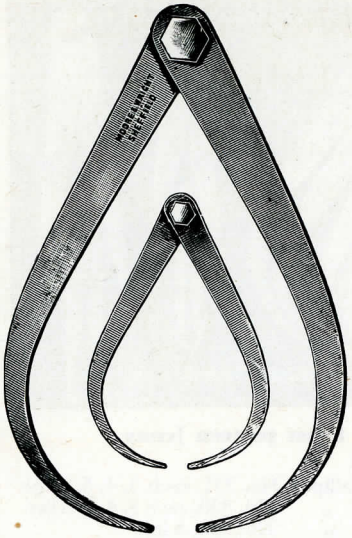
14/6 per Card

We shall be pleased to mount any other assortment to customer's requirements.

Contents of Card No. 366

1	Spring Divider	50	6	in.
1	„ „	53	3	„
1	„ „	53	5	„
1	„ Calliper	52	3	„
1	„ „	52	4	„
1	„ „	51	5	„

MOORE & WRIGHT
(SHEFFIELD) LTD.
ENGLAND



"MOORBRITE" STAINLESS FIRM JOINT CALLIPERS

These Callipers embody all the qualities of our Firm Joint Callipers, i.e., durability, even tension and finish.

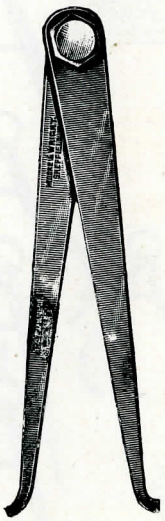
HEXAGON HEADED NUTS ON ALL SIZES

JOINTS OF STEEL WITH A VELVET FEEL

No. 385 Inside No. 386 Outside	.. ..	length	3	4	5	6	inch
	.. ..	price	1/6	2/–	2/6	3/–	pair

Packed in ½ dozens.

These Callipers will never rust, and the joints will always remain good and smooth.



No. 388 Card of 12 assorted of above, consisting of :—

2 Insides	each 3 in. and 4 in.
1 Inside	„ 5 in. and 6 in.
2 Outsides	„ 3 in. and 4 in.
1 Outside	„ 5 in. and 6 in.

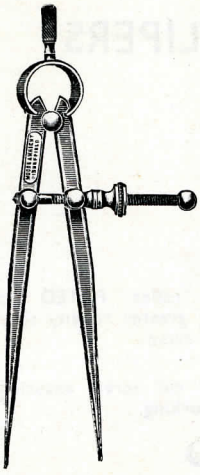
per Card 25/–

F. J. Callipers measure approximately one-third greater than their nominal size.

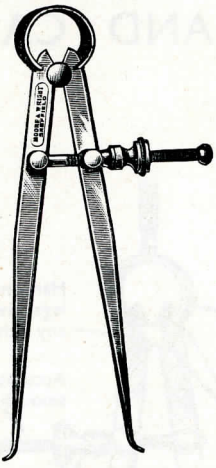
SHEFFIELD SPRING DIVIDERS AND CALLIPERS

WITH SOLID AND QUICK NUTS

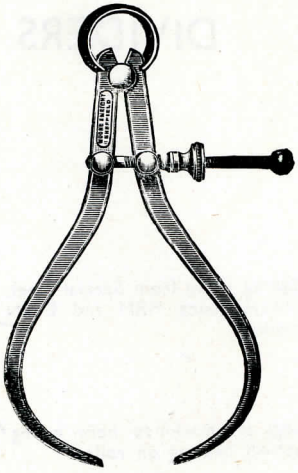
NOTE.—All our Dividers and Callipers are measured from **the joint to the point,** consequently a 3 in. measures approximately 4 in. overall. Be aware of this when ordering. These Callipers and Dividers measure their nominal size only.



No. 50



No. 51



No. 52

Moore's Patent Quick Nut.

All Dividers have compressed and hammered points.
Full Standard Strength

These Dividers are full strength, accurately machined and rigidly made.
All wearing parts carefully hardened.

No. **50**	Dividers, Ordinary Nut	..	3	4	5	6	8	10 inch
No. **51**	Inside Callipers „							
No. **52**	Outside Callipers „	..	1/9	2/–	2/3	2/6	4/6	5/9 pair
No. **53**	Dividers, Quick Nut	..	3	4	5	6	8	10 inch
No. **54**	Inside Callipers „							
No. **55**	Outside Callipers „	..	2/6	2/9	3/–	3/3	5/3	6/6 pair

Packed in ½ dozens and ¼ dozens.

IT IS NOT POSSIBLE TO MAKE BETTER TOOLS.

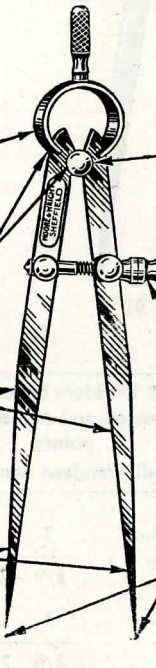
MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

POINTS OF SUPERIORITY

OF

M&W

DIVIDERS AND CALLIPERS



Spring made from Special Steel, always giving FIRM and EVEN tension.

Legs are machined here giving perfect bearing on roller.

Legs made of Cast Steel.

Legs accurately shaped near ends giving good appearance and absence of chatter in use.

Hardened roller FITTED to legs giving greater rigidity than any other make.

Accurately cut screw ensuring smooth working.

Solid nuts or quicknuts of our well-known design.

These points are hammered in a special rotary hammer giving 3,000 blows per minute. This imparts special toughness to the Steel enabling the hardening process to give lasting wearing qualities.

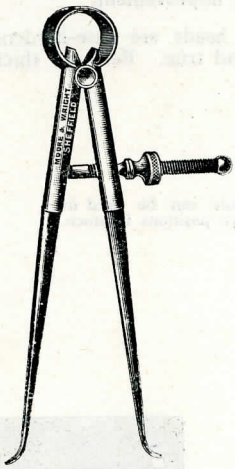
MORE RIGID THAN ANY OTHER MAKE.

● MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

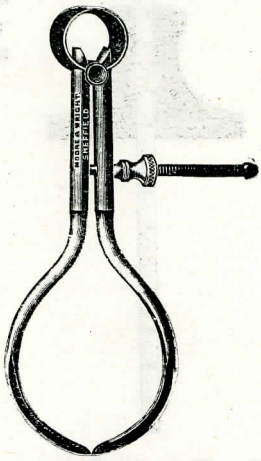
Round Leg TOOLMAKERS' DIVIDERS and CALLIPERS

These Tools are made from round bar with the legs drawn down, are finely and accurately finished and may be regarded as the finest tools of their kind. The springs are finely tempered, and the fulcrum stud is hardened. They are made in one size only, namely, 3 inch, and the price has been kept low in order to bring them within reach of all.

No. 65

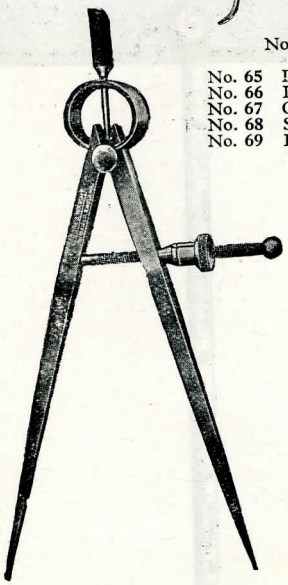


No. 66



No. 67

No. 65	Dividers,	3 in., one size only ..	4/3 each
No. 66	Inside Callipers,	3 in. „ ..	4/3 „
No. 67	Outside „	3 in. „ ..	4/3 „
No. 68	Set of 3 in folding leather case	.. ..	14/6 „
No. 69	Leather case only	..	3/– „



THE HECTOR SPRING DIVIDER

This is the Spring Divider which in open competition with all other makes secured the British Government contract when it was decided to improve the Service tools.

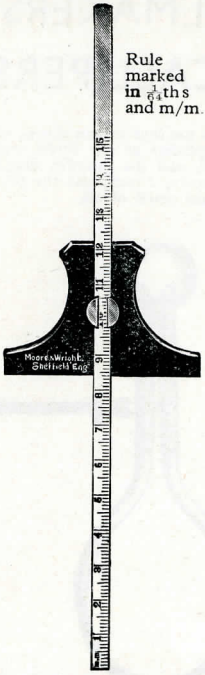
In point of rigidity, durability and pleasure of using, it is unequalled. It is fitted with split nut, giving instantaneous opening and closing, the spring is an example of the springmaker's art, and the finish and fitting will be found all that can be desired.

No. 60 .. .. 5/9 per pair

Made in 6 in size only

Packed in ½ dozens

DEPTH GAUGES

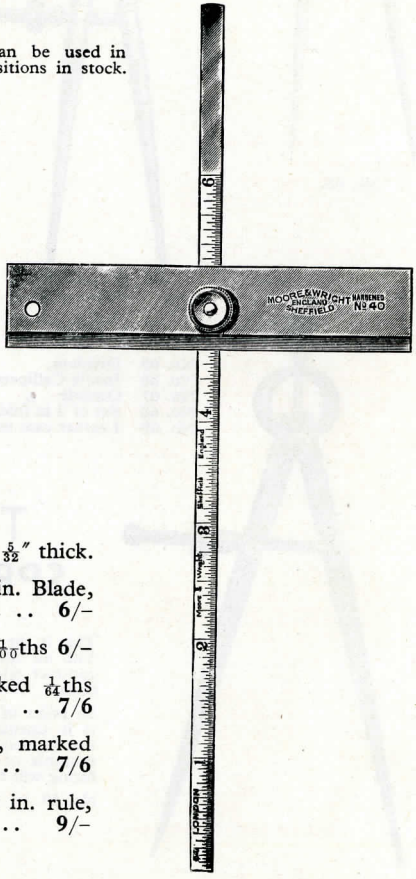


Rule marked in $\frac{1}{64}$ths and m/m.

The Depth Gauge illustrated herewith represents our remodelled No. 43. It is fitted with a 6 in. narrow steel rule. The body has been increased in thickness, and shortened in length, and this will be found a substantial advantage, it being now a much more rigid and substantial tool than formerly. The locking nut arrangement is new and constitutes a great improvement.

The heads are case-hardened. The base line is ground true. Base $\frac{5}{32}''$ thick.

Rule can be used in two positions in stock.



No. **43** as described and illustrated .. 5/– each

No. **43A**, $\frac{1}{64}$ths and $\frac{1}{100}$ths .. 5/– each

No. **43B**, 12″ Rule, $\frac{1}{64}$ths and $\frac{1}{100}$ths only . 7/– each

The bases of Nos. 40, 41 & 42 are $\frac{5}{32}''$ thick.

No. **40** With $3\frac{1}{2}$ in. stock and 6 in. Blade, marked in $\frac{1}{64}$ths and millimetres .. 6/–

No. **40A** Rule marked $\frac{1}{64}$ths and $\frac{1}{100}$ths 6/–

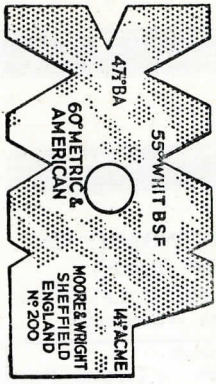
No. **41** 6 in. stock, 6 in. rule, marked $\frac{1}{64}$ths and millimetres 7/6

No. **41A** 6 in. stock, 6 in. rule, marked $\frac{1}{64}$ths and $\frac{1}{100}$ths 7/6

No. **42A** With 6 in. stock and 12 in. rule, marked $\frac{1}{64}$ths and $\frac{1}{100}$ths 9/–

Packed in $\frac{1}{4}$ dozens

IMPROVED SCREW-CUTTING GAUGES



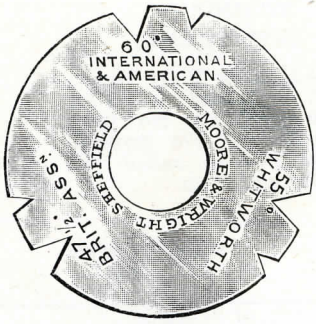
No. 200

No. 200

The old Gauge with the angle piece is now abandoned, and the new Gauge is introduced as being more useful to the Engineer. It now contains four Gauges, namely, 60 degrees American, 55 degrees Whitworth, 47½ degrees B.A. and 14½ degrees Acme.

Price **1/9** each

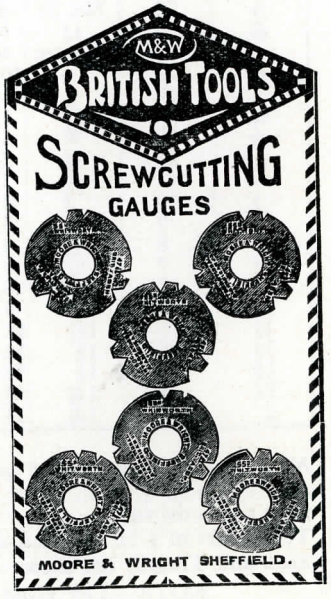
Packed in ½ dozens.



No. 203

Useful Gauge for grinding tools to correct angles.
B.S.F. Whit. and International
1/- each.

No. 200A .. **5/6** per Card



No. 203A .. **6/3** per Card

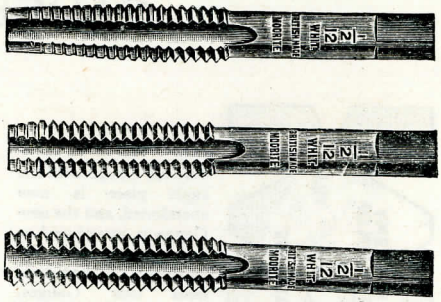
MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

STANDARD THREAD TAPS

Finest Quality
Four Fluted

TAPER.
SECOND.
BOTTOMING.

Add letter T for Taper; S for Second; and B for Bottoming to No. when ordering. For example, **843T** $\frac{1}{8}$ in. means No. **843** taper $\frac{1}{8}$ in.



WHITWORTH.
No. 843

Dia. of Tap, inches.	Threads per inch.	Tapping Drill.	Price each
$\frac{1}{16}$	60	No. 56	1/-
$\frac{3}{32}$	48	No. 50	7d.
$\frac{1}{8}$	40	No. 40	6d.
$\frac{5}{32}$	32	No. 31	6d.
$\frac{3}{16}$	24	No. 28	6d.
$\frac{7}{32}$	24	$\frac{11}{64}$	6d.
$\frac{1}{4}$	20	5 m/m	6d.
$\frac{5}{16}$	18	$\frac{1}{4}$	10d.
$\frac{3}{8}$	16	$\frac{5}{16}$	1/-
$\frac{7}{16}$	14	$\frac{23}{64}$	1/3
$\frac{1}{2}$	12	W	1/3
$\frac{9}{16}$	12	$\frac{15}{32}$	2/-
$\frac{5}{8}$	11	$\frac{33}{64}$	2/-
$\frac{3}{4}$	10	$\frac{9}{8}$	2/7
$\frac{7}{8}$	9	$\frac{47}{64}$	3/6
1	8	$\frac{27}{32}$	4/-
$1\frac{1}{8}$	7	$\frac{61}{64}$	6/6
$1\frac{1}{4}$	7	$1\frac{3}{64}$	8/6
$1\frac{3}{8}$	6	$1\frac{11}{64}$	9/3
$1\frac{1}{2}$	6	$1\frac{19}{64}$	11/6
$1\frac{5}{8}$	5	$1\frac{3}{8}$	14/-
$1\frac{3}{4}$	5	$1\frac{1}{2}$	16/6
$1\frac{7}{8}$	$4\frac{1}{2}$	$1\frac{19}{32}$	20/-
2	$4\frac{1}{2}$	$1\frac{23}{32}$	23/-

BRITISH STANDARD FINE.
No. 845 (B.S.F.)

Up to $\frac{5}{32}$" dia. B.S.F. is the same as Whitworth.

Dia. of Tap, inches.	Threads per inch.	Tapping Drill.	Price each
$\frac{3}{16}$	32	24	6d.
$\frac{7}{32}$	28	16	6d.
$\frac{1}{4}$	26	6	6d.
$\frac{9}{32}$	26	B	10d.
$\frac{5}{16}$	22	F	10d.
$\frac{3}{8}$	20	O	1/-
$\frac{7}{16}$	18	U	1/3
$\frac{1}{2}$	16	$\frac{27}{64}$	1/3
$\frac{9}{16}$	16	$\frac{31}{64}$	2/-
$\frac{5}{8}$	14	$\frac{35}{64}$	2/-
$\frac{11}{16}$	14	$\frac{39}{64}$	2/3
$\frac{3}{4}$	12	$\frac{21}{32}$	2/7
$\frac{7}{8}$	11	$\frac{49}{64}$	3/6
1	10	$\frac{7}{8}$	4/-
$1\frac{1}{8}$	9	$\frac{63}{64}$	6/6
$1\frac{1}{4}$	9	$1\frac{7}{64}$	8/6
$1\frac{3}{8}$	8	$1\frac{7}{32}$	9/3
$1\frac{1}{2}$	8	$1\frac{11}{32}$	11/6
$1\frac{5}{8}$	8	$1\frac{15}{32}$	14/-
$1\frac{3}{4}$	7	$1\frac{37}{64}$	16/6
$1\frac{7}{8}$	7	$1\frac{45}{64}$	20/-
2	7	$1\frac{53}{64}$	23/-

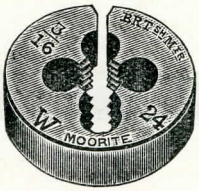
All Taps $\frac{1}{8}$ in. diameter, and smaller, will be supplied with $\frac{1}{8}$ in. shanks.
All Taps from $\frac{1}{8}$ in. to $\frac{5}{16}$ in. inclusive will be supplied with shanks the same size as the tap.
The shanks of $\frac{3}{8}$ in. taps and above are made to drop through.
Sizes and Threads not shown are subject to special prices.

NOTE.—Left Hand Taps are special at extra price.

SPECIAL QUOTATIONS FOR LARGE QUANTITIES.

CIRCULAR DIES

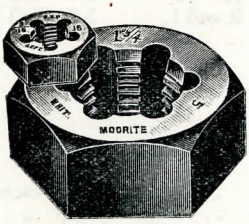
Threads per Inch.			No.	No.	No.	No.	No.
Cutting Size.	Whit.	B.S.F.	423 823 $\frac{13}{16}$″	424 824 1″	425 825 1¼″	426 826 1 $\frac{5}{16}$″	427 827 1½″
$\frac{1}{16}$	60	60	1/3				
$\frac{3}{32}$	48	48	1/3				
$\frac{1}{8}$	40	40	1/3	2/6			
$\frac{5}{32}$	32	32	1/3	2/6			
$\frac{3}{16}$	24	32	1/3	2/6			
$\frac{7}{32}$	24	28	1/3	2/6			
$\frac{1}{4}$	20	26	1/3	2/6	3/9	3/9	5/–
$\frac{9}{32}$	20	26	1/3	2/6	3/9	3/9	5/–
$\frac{5}{16}$	18	22	1/3	2/6	3/9	3/9	5/–
$\frac{11}{32}$	18	22	1/3	2/6	3/9	3/9	5/–
$\frac{3}{8}$	16	20	1/3	2/6	3/9	3/9	5/–
$\frac{7}{16}$	14	18		2/6	3/9	3/9	5/–
$\frac{1}{2}$	12	16		2/6	3/9	3/9	5/–
$\frac{9}{16}$	12	16			4/–	4/–	5/–
$\frac{5}{8}$	11	14			4/–	4/–	5/–
$\frac{3}{4}$	10	12					5/–



No. 823 to No. 827 } Whit.

No. 423 to No. 427 } B.S.F.

DIE NUTS



No. 875

WHITWORTH AND B.S.F. THREADS

No. 875 Whitworth.

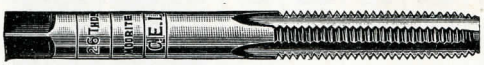
No. 876 B.S.F.

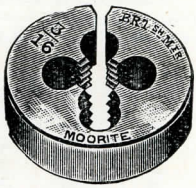
These Dies, which are generally used for dressing bruised and old threads, are screwed $\frac{2}{1000}$ under size, which thus facilitates the nuts and female parts assembling easily.

¼ in.	2/– each	1 in.	5/6 each
$\frac{5}{16}$ in.	2/– „	1⅛ in.	7/– „
⅜ in.	2/6 „	1¼ in.	7/6 „
$\frac{7}{16}$ in.	2/9 „	1⅜ in.	8/6 „
½ in.	3/– „	1½ in.	9/9 „
$\frac{5}{8}$ in.	4/– „	1¾ in.	18/– „
¾ in.	4/4 „	2 in.	25/6 „
$\frac{7}{8}$ in.	5/– „		

HAND TAPS AND DIES

C.E.I. STANDARD
CYCLE MOTOR THREAD





TAPS No. 835

Taper, Second or Bottoming.

Size.	Threads per inch.	Each.	Size.	Threads per inch.	Each.
1/8	40	**10d.**	3/8	20	1/2
3/16	26	**10d.**	3/8	24	1/2
3/16	28	**10d.**	3/8	26	1/2
3/16	32	**10d.**	3/8	32	1/2
1/4	24	**10d.**	7/16	19	1/5
1/4	26	**10d.**	7/16	20	1/5
1/4	28	**10d.**	7/16	24	1/5
1/4	30	**10d.**	7/16	26	1/5
5/16	20	1/1	1/2	19	1/7
5/16	24	1/1	1/2	20	1/7
5/16	26	1/1	1/2	24	1/7
5/16	28	1/1	1/2	26	1/7
5/16	30	1/1	9/16	20RH	1/10
5/16	32	1/1	9/16	20LH	1/10

DIES

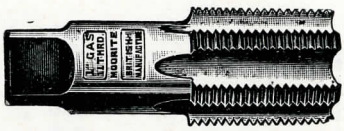
(Numbers over each column)

C.E.I. and Motor Threads.

Size.	Threads per inch	Nos.		Outside Diameter 836 13/16	837 1	838 1 1/4	839 1 5/16
1/8	40			2/–	3/–		
3/16	26	28		2/–	3/–		
	30	32		2/–	3/–		
1/4	24			2/–	3/–	6/3	
	28	30		2/–	3/–	6/3	
1/4	26			2/–	3/–	6/3	
5/16	20	24	26	2/–	3/–	6/3	
	28	30	32	2/–	3/–	6/3	
3/8	20	24	26	2/–	3/–	6/3	
	32				3/–	6/3	
7/16	19	20	24		3/–	6/3	
1/2	19	20	24		3/–	6/3	
9/16	20	R and L			3/6	6/3	

GAS TAPS

(IRON).



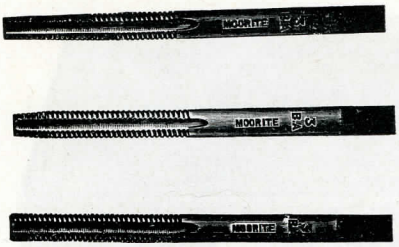
No. **840**

1/8	in.	.. ..	1/3 each
1/4	in.	.. ..	1/8 „
3/8	in.	.. ..	2/– „
1/2	in.	.. ..	2/6 „
5/8	in.	.. ..	3/– „
3/4	in.	.. ..	3/8 „
7/8	in.	.. ..	4/9 „
1	in.	.. ..	5/3 „
1 1/4	in.	.. ..	7/– „
1 1/2	in.	.. ..	9/– „
1 3/4	in.	.. ..	10/6 „
2	in.	.. ..	16/– „

All Left Hand Threads are Special Prices.

HAND TAPS

B.A. BRITISH ASSOCIATION THREAD



No. **841**

TAPER, SECOND or BOTTOMING.

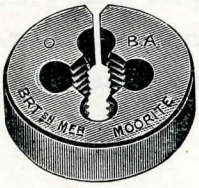
State which are required when ordering.

No.	Pitch m/m	Price. Each.	Set.
0	1·00	**7d.**	**1/9**
1	·90	**7d.**	**1/9**
2	·81	**7d.**	**1/9**
3	·73	**7d.**	**1/9**
4	·66	**7d.**	**1/9**
5	·59	**7d.**	**1/9**
6	·53	**7d.**	**1/9**
7	·48	**7d.**	**1/9**
8	·43	**7d.**	**1/9**
9	·39	**1/–**	**3/–**
10	·35	**1/–**	**3/–**

ADJUSTABLE CIRCULAR DIES

BRITISH ASSOCIATION THREAD

OUTSIDE DIAMETER $\frac{13}{16}$ in.

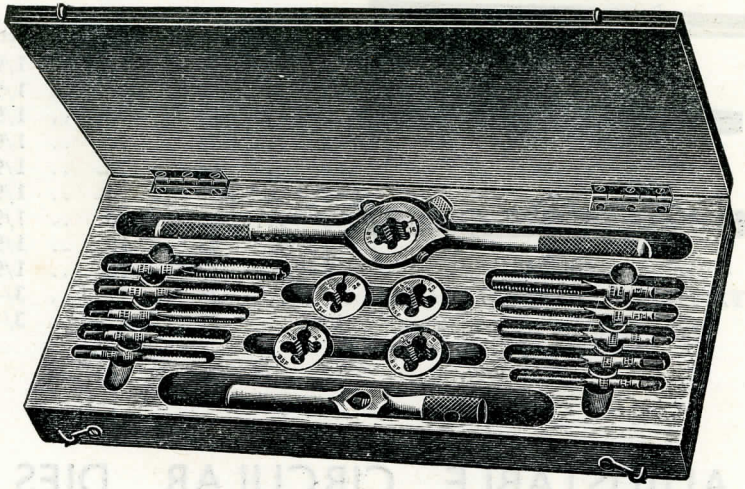


No. **821**

No.	B.A. Pitch m/m.	Outside Diameter. $\frac{13}{16}$ in.
0	1·00	**1/3** each
1	·90	**1/3** „
2	·81	**1/3** „
3	·73	**1/3** „
4	·66	**1/3** „
5	·59	**1/3** „
6	·53	**1/3** „
7	·48	**1/3** „
8	·43	**1/3** „
9	·39	**1/10** „
10	·35	**1/10** „

"MOORITE" STOCKS & DIES

IN HARDWOOD CASES



No. 862

British Standard Fine Thread

(B.S.F.)

The above Case shows a set of $\frac{1}{4}$ in., $\frac{5}{16}$ in., $\frac{3}{8}$ in., $\frac{7}{16}$ in., $\frac{1}{2}$ in., with both taper and bottoming taps, tap wrench, die holder, and five circular dies of the sizes given. The price of this set is **36/6**

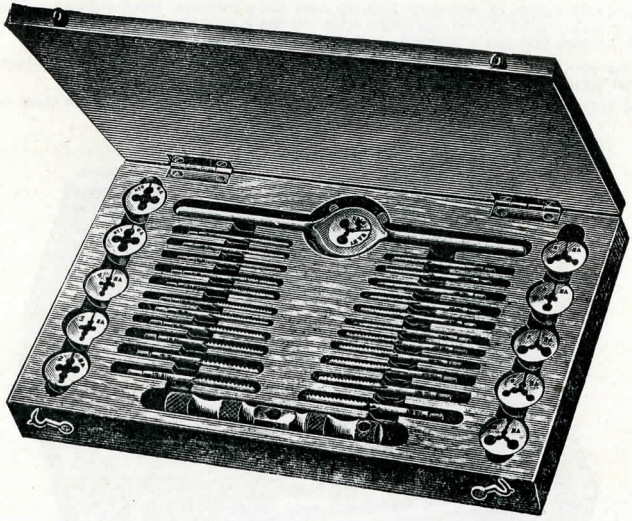
All 1 in. dia. dies.

No. 105 Tapholder is now fitted to this set.

Stocked in all the regular ranges.

"MOORITE" STOCKS & DIES

IN HARDWOOD CASES



No. **863**

British Association Thread (B.A.). Any other range than those specified below can be supplied at short notice.

No. **863**		**863/1** With stock and dies and taper taps only.	**863/2** With taper taps and tap wrench.	**863/3** With taper and bott. taps, and tap wrench.
A Cutting sizes ..	0, 1, 2			
B „ „ ..	0, 2, 4			
C „ „ ..	1, 2, 3			
D „ „ ..	2, 4, 6	**11/–**	**12/–**	**14/6**
E „ „ ..	3, 4, 5			
F „ „ ..	6, 7, 8			
G „ „ ..	0, 1, 2, 3, 4	**15/–**	**16/–**	**20/–**
H „ „ ..	5, 6, 7, 8, 9	**16/–**	**17/–**	**21/–**
I „ „ ..	0, 2, 4, 6, 8	**15/–**	**16/–**	**20/–**
J „ „ ..	1, 3, 5, 7, 9	**16/–**	**17/–**	**21/–**
K „ „ ..	2, 4, 6, 8, 10	**16/–**	**17/–**	**21/–**
L „ „ .. as illustration.	0–10 inclusive—	**30/–**	**31/–**	**38/–**

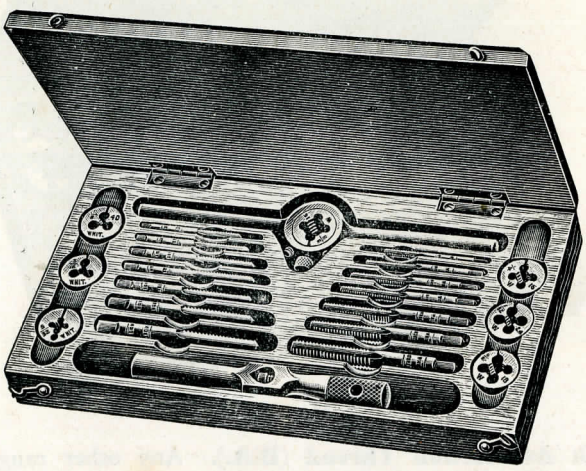
"MOORITE" STOCKS AND DIES

IN HARDWOOD CASES

The Cases shown on this page and the next are a selection from a series. They are of the same high quality always associated with our mark, and we guarantee that for durability, ease of working and finely-finished product they are unequalled.

These goods are thoroughly tested after every manufacturing operation and are offered with full confidence.

Any range of sizes other than those mentioned below can be supplied at short notice.



No. 861

WHITWORTH STANDARD THREAD.

No. 861 WITH TAPER TAPS, DIES, DIEHOLDER AND TAP WRENCH.

A $\frac{1}{8}$, $\frac{5}{32}$, $\frac{3}{16}$ in. — **12/-**

B $\frac{1}{8}$, $\frac{3}{16}$, $\frac{1}{4}$ in. — **12/-**

C $\frac{3}{16}$, $\frac{7}{32}$, $\frac{1}{4}$ in. — **12/-**

D $\frac{3}{16}$, $\frac{1}{4}$, $\frac{5}{16}$ in. — **12/-**

E $\frac{1}{8}$, $\frac{5}{32}$, $\frac{3}{16}$, $\frac{7}{32}$, $\frac{1}{4}$ in. — **16/-**

F $\frac{1}{8}$, $\frac{3}{16}$, $\frac{7}{32}$, $\frac{1}{4}$, $\frac{5}{16}$ in. — **17/-**

G $\frac{1}{8}$, $\frac{3}{16}$, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$ in. — **17/-**

GIVE No. AND LETTER WHEN ORDERING.

H	$\frac{1}{16}$	$\frac{3}{32}$	$\frac{1}{8}$	$\frac{5}{32}$	$\frac{3}{16}$	$\frac{7}{32}$	$\frac{1}{4}$ in. 21/-
I	$\frac{1}{8}$	$\frac{5}{32}$	$\frac{3}{16}$	$\frac{7}{32}$	$\frac{1}{4}$	$\frac{9}{32}$	$\frac{5}{16}$ in. 21/-
J	$\frac{3}{8}$	$\frac{5}{32}$	$\frac{3}{16}$	$\frac{7}{32}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$ in. 21/-
K	$\frac{3}{16}$	$\frac{7}{32}$	$\frac{1}{4}$	$\frac{9}{32}$	$\frac{5}{16}$	$\frac{11}{32}$	$\frac{3}{8}$ in. 21/-

For Sets with Taper and Bottoming Taps see next page.

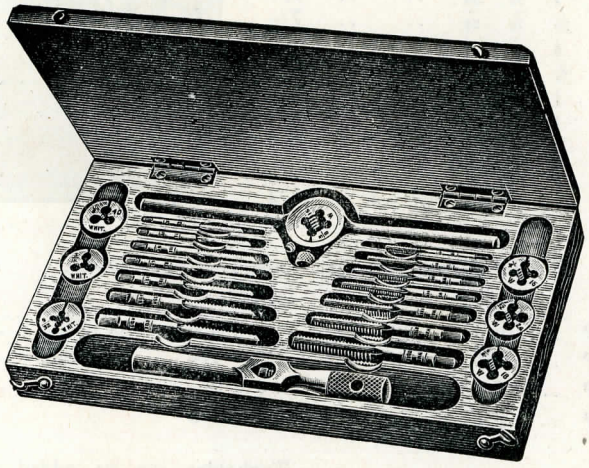
"MOORITE" STOCKS AND DIES

IN HARDWOOD CASES

The Cases shown on this page and the next are a selection from a series. They are of the same high quality always associated with our mark, and we guarantee that for durability, ease of working and finely-finished product they are unequalled.

These goods are thoroughly tested after every manufacturing operation and are offered with full confidence.

Any range of sizes other than those mentioned below can be supplied at short notice.



No. 861/1

No. 861/1 WITH TAPER AND BOTTOMING TAPS AND TAP WRENCH, DIES AND DIEHOLDER.

L 1/4, 5/32, 3/16, 7/32, 1/4 in. — 20/-

M 1/8, 3/16, 7/32, 1/4, 5/16 in. — 20/-

N 1/8, 3/16, 1/4, 5/16, 3/8 in. — 21/-

O 1/4, 5/16, 3/8, 7/16, 1/2 in. — 36/-

P 1/4, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8 in. — 26/-

Q 1/4, 5/16, 3/8, 7/16, 1/2, 5/8, 3/4, 7/8, 1, 1 1/8, 1 1/4 in. — 295/-

R 1/4, 5/16, 3/8, 7/16, 1/2, 5/8, 3/4 in. — two tap wrenches 92/-

Any other range quoted for on request.

ENGINEERS' STOCKS, DIES AND TAPS

CARDED SERIES
WHITWORTH THREAD

Sizes Cutting.						With Taper Taps, Dies and Holder.
No. 850	1/16	3/32	1/8	..	..	8/–
„ 851	3/32	1/8	5/32	..	..	7/–
„ 852	1/8	5/32	3/16	..	..	7/–
„ 853	5/32	3/16	7/32	..	..	7/–
„ 854	1/8	3/16	1/4	..	..	7/–
„ 855	3/16	1/4	5/16	..	..	7/6
„ 856	1/4	5/16	3/8	..	..	7/6
„ 857	1/8	3/16	1/4	5/16	..	9/3
„ 858	3/16	1/4	5/16	3/8	..	9/3
„ 859	1/8	5/32	3/16	1/4	5/16 ..	10/9
„ 860	1/8	3/16	1/4	5/16	3/8 ..	11/3

With Taper and Plug Taps, Dies and Holder.

No. 850P ..	10/–	No. 854P ..	8/6	No. 858P ..	11/6
„ 851P ..	8/6	„ 855P ..	9/–	„ 859P ..	14/–
„ 852P ..	8/6	„ 856P ..	9/–	„ 860P ..	14/6
„ 853P ..	8/6	„ 857P ..	11/6		

Screwdriver is added to all these Sets Free of Charge.

Tapholder can be added to any No. up to 854 at 1/– extra, and to all Nos. 855 and above at 1/6 extra.

Any Assortment of sizes can be made up on request.

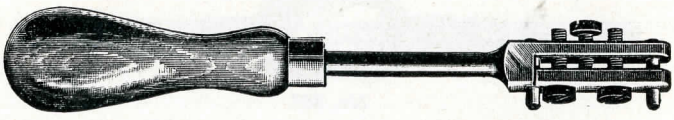
SPECIAL PRICE FOR LARGE QUANTITIES.

NOTE.—While we are at all times willing to make Taps and Dies of special threads, we wish to advise customers that the cost is very much higher than that for standard goods, owing to small quantities having to be put through, and also that new masters have to be made before the work of making the specials can begin. We shall always charge as reasonably as possible but we have thought it advisable to mention that whenever goods are not made in large quantities the price is proportionately higher.

No. **804** Consisting of one **drop-forged steel** die-holder, one tap and adjustable die for each, 2, 4 and 6 B.A. thread .. .. **7/6** per set

No. **804D** Exact as illustration, but **with the addition of one tapping size twist drill** for each of the three size taps .. .. **8/3** per set

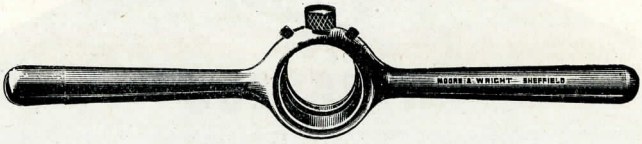
HAND KNURL HOLDER



No. **420** A most substantial tool, adjustable to take all thicknesses up to $\frac{11}{16}$ in. dia. and $\frac{3}{8}$ in. thickness.

Price .. .. **3/6** each

AMERICAN PATTERN DIE HOLDERS



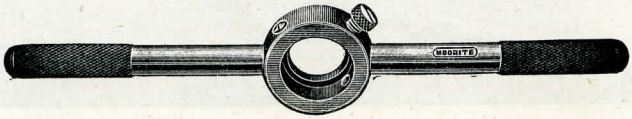
Forged Steel. Bright Finish.

No. 115 Holding $\frac{13}{16}$ in. dies .. .. 1/8 each

NOTE.—Having 3 adjusting screws these Die Holders will hold any type of die.

Packed in $\frac{1}{2}$ dozens.

CIRCULAR DIE STOCKS



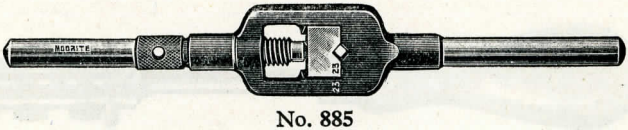
No. 884

The small Stocks are made from Drop Steel Forgings, the larger Stocks are machined from Mild Steel, consequently they all have a very clean appearance. Both handles are knurled, and the centre is highly finished, and their general quality and finish are far in advance of the usual Die Stock now on the market.

B	To take Circular Dies	1 in. diam.	3/6	each
C	„ „	$1\frac{1}{4}$ in. „	8/6	„
D	„ „	$1\frac{5}{16}$ in. „	8/6	„
E	„ „	$1\frac{1}{2}$ in. „	10/6	„
F	„ „	$1\frac{3}{4}$ in. „	14/3	„
G	„ „	2 in. „	16/–	„

Packed singly.

ADJUSTABLE TAP WRENCHES



No. 885

These tools are made from best Sheffield Steel, are well made and finished and are accurate and strong.

A	Taking Taps	$\frac{1}{4}$ to $\frac{1}{2}$ in.	5/3	each
B	„	$\frac{1}{4}$ to $\frac{3}{4}$ in.	12/8	„
C	„	$\frac{1}{2}$ to 1 in.	17/6	„
D	„	$\frac{3}{4}$ to $1\frac{1}{2}$ in.	27/–	„

Packed singly.

IMPROVED TOOL AND TAP HOLDERS

No. **102** This little tool will hold reamers, taps, drills, etc., of any shape, round, square or oval. It is nicely knurled and finished. The handles near the ends are recessed to prevent the fingers sliding off during use. Size, 4 in. long, $\frac{7}{16}$ in. diameter. Capacity 0 to $\frac{1}{4}$ in.

Price .. **10½d.** each.

Packed in $\frac{1}{2}$ dozens.

See page 107 for Carded Tapholders.

No. **103** This little tool is of the same capacity as No. 102 above, and is of superior design and handier to use ; lighter, but just as strong.

Length, 3½ in. ; Dia. $\frac{7}{16}$ in. ; Capacity, 0 to $\frac{1}{4}$ in. Price .. **1/–** each

No. **111** As No. 103, but taking up to $\frac{3}{8}$ in. .. .. .. **1/6** „

Packed in $\frac{1}{2}$ dozens.

No. **104** This wrench is of an improved design, and will hold taps more rigidly than any other pattern wrench made. Taps or other tools such as reamers, drills, etc., with either square or round shanks can be held absolutely firm. As shown in the illustration, the taps are gripped ***in a V at each side*** thus giving very great holding power. Length, 5¾ in. Capacity, $\frac{1}{8}$ in. to $\frac{3}{8}$ in. taps.

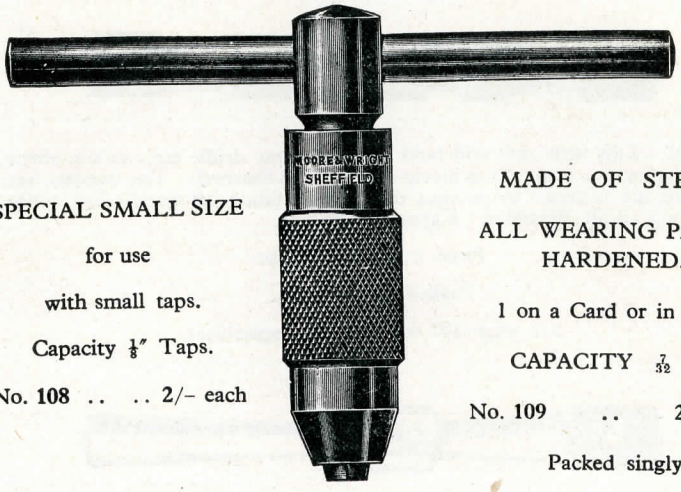
Packed in $\frac{1}{2}$ dozens.

Price .. .. **3/– each**

No. 105 Length, 8¼ in. ; Capacity, $\frac{5}{16}$ to $\frac{1}{2}$ in. taps. Price .. **4/6 each**

Packed in $\frac{1}{4}$ dozens

CHUCK PATTERN TAP HOLDER



SPECIAL SMALL SIZE

for use

with small taps.

Capacity $\frac{1}{8}$" Taps.

No. **108** .. .. 2/- each

MADE OF STEEL.

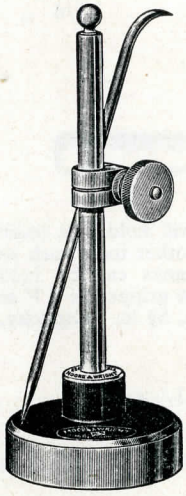
ALL WEARING PARTS HARDENED.

1 on a Card or in Box.

CAPACITY $\frac{7}{32}$ in.

No. **109** .. **2/6** each

Packed singly



SURFACE GAUGE

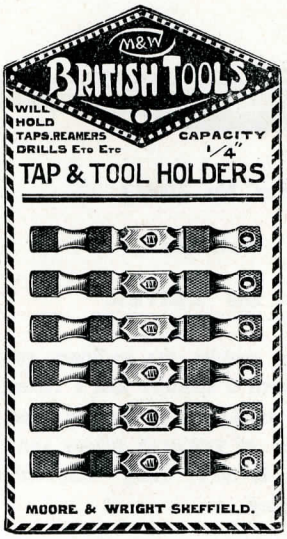
No. **404**

This Surface Gauge has been introduced to fill the demand for a really reliable article at a fair price. It is a handy tool, well proportioned and rigid. The post is of steel, and the base is heavy and turned and faced true. The scribers are made from the best drill rod, the sliding head is cut from the solid bar, this being much superior to a casting, and the nut is of ample size to ensure a firm grip. Packed one in a box.

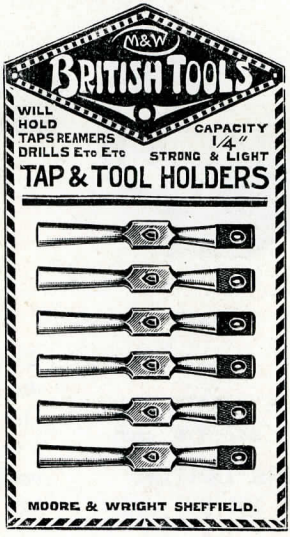
		6	9	12 ins.
No. **404**	Turned Base	**3/6**	**5/6**	**7/6** each

Packed singly

TAP HOLDERS ON CARDS

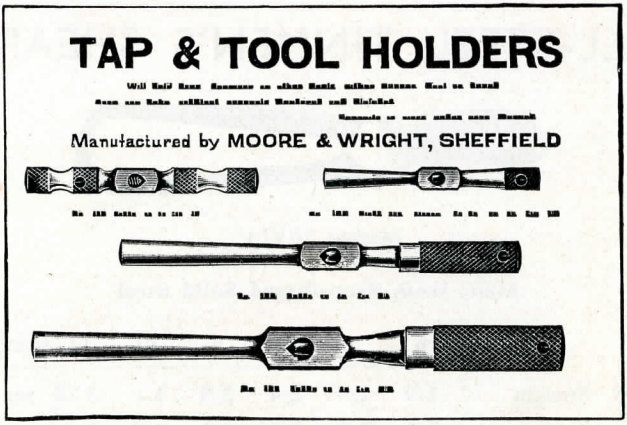


No. 102A
1 Card as shown .. 5/6 per card



No. 103A
1 Card as shown .. 6/3 per card

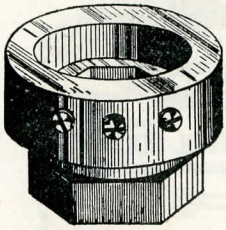
No. 111A
1 Card of 6, large size 9/3 per card



No. 107
The above illustrates a very handy form of showing Tap Holders. It consists of one Tap Holder each Nos. 102, 103, 104 and 105, on an attractive card.
Price .. .. 9/9 card

DIE ADAPTOR AND DRIVER

for $\frac{13}{16}$" diam. dies.



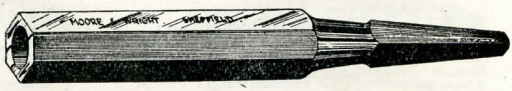
Full Size.

No. 887

Price :

DIE ADAPTOR.
No. **887 1/6** each

DIE DRIVER.
No. **888 1/–** each



Reg. No. **729413**

Half Size.

No. **888 DRIVER.**

This Die Adaptor enables the ordinary round die to be used with a spanner like a Hexagon Die Nut. With the Driver it can be used in a brace. All sorts of awkward places can be reacned with it. It turns many "impossible'' jobs into child's play.

THIS IS A SURPRISINGLY USEFUL TOOL.

Packed in $\frac{1}{4}$ dozens.

ALL-STEEL TINMEN'S SHEARS

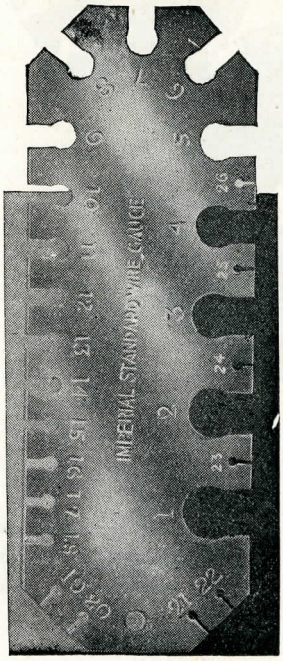
Marked "AVIA"

Made from drop-forged Solid Steel

		6	7	8	9	10	12	inch
No. 295	Straight ..	1/9	2/–	2/4	2/8	3/–	3/10	per pair
No. 296	Bent ..	2/6	2/8	3/2	3/8	4/4	5/4	„

Packed in $\frac{1}{2}$ dozens

WIRE GAUGES



No. **1057** oblong 1 to 26 **5/6** each

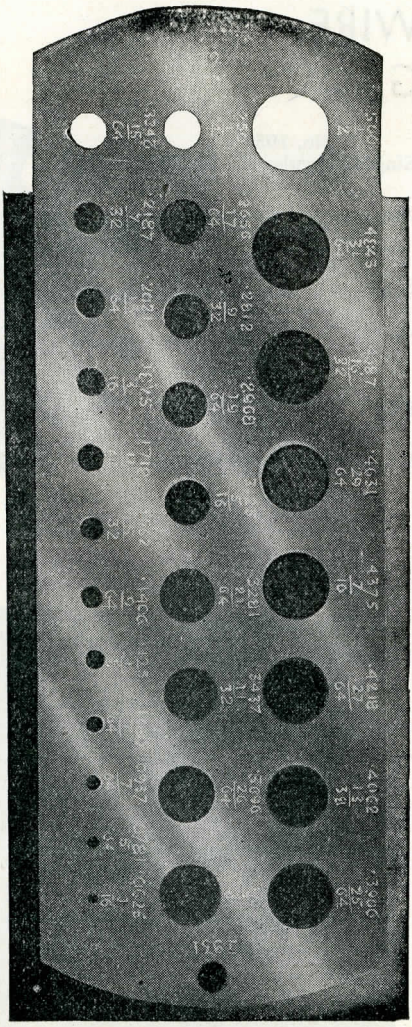
No. **1057C**, Leather Case, **6d.** each

No. **1058** oblong 1 to 36 **8/-** each

No. **1058C** Leather Cases **6d.** each

All Gauges are guaranteed accurate, the slots being rectified after hardening.

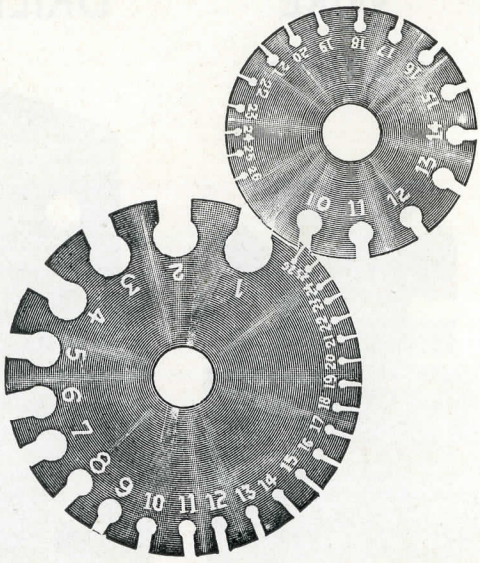
DRILL GAUGE



No. **1059** Jobbers drill gauge from $\frac{1}{16}$ to $\frac{1}{2}$ by 64ths .. **9/-** each

No. **1059C** Leather Case .. **8d.** each

IMPERIAL STANDARD WIRE GAUGES



No. **1050**
Single Circular 10 to 26
4/– each

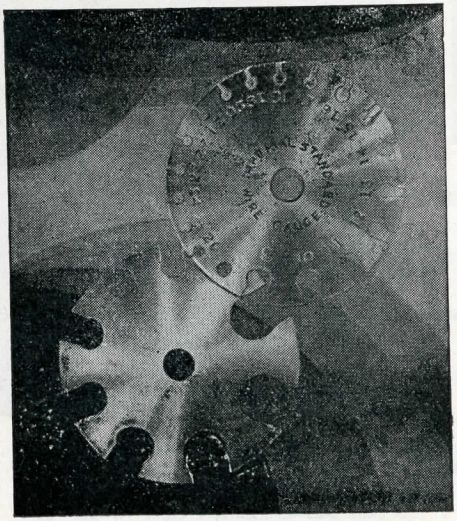
No. **1050C** Leather Case,
3d. each

No. **1051**
Single Circular 1 to 26
5/**6** each

No. **1051C** Leather Case,
6d. each

No. **1052**
Single Circular 1 to 36
8/– each

No. **1052C** Leather Cases,
6d. each



All Gauges are guaranteed accurate, the slots being rectified after hardening.

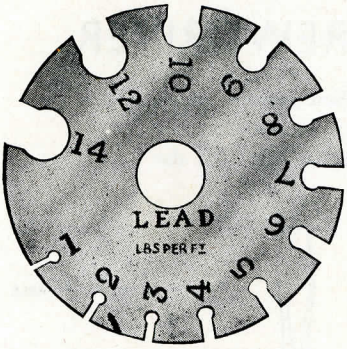
No. **1054**
Double Circular 1 to 26
5/**6** each

No. **1054C** Leather Case,
6d. each

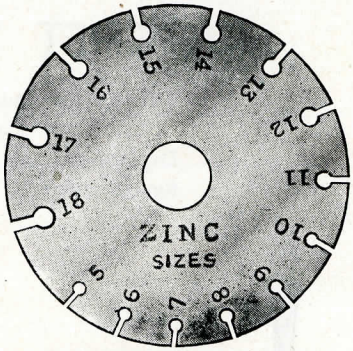
No. **1055**
Double Circular 1 to 36
8/– each

No. **1055C** Leather Cases,
6d. each

ZINC AND LEAD GAUGES

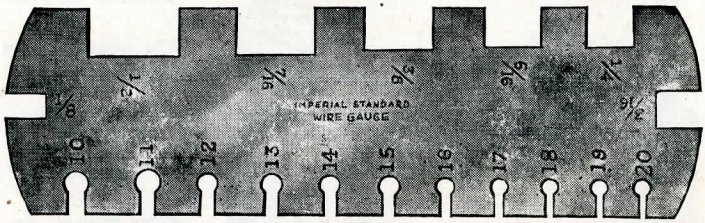


Lead Gauge, 1 to 14 lbs. per foot.
No. **1061** Price .. 3/4 each



Zinc Gauge, 5 to 18 gauge.
No. **1062** Price .. 3/4 each

COMBINED WIRE AND SIZE GAUGE

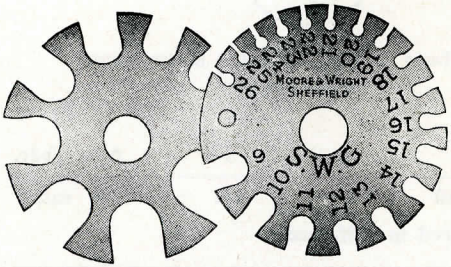


Contains Standard Wire Gauges, 10 to 20, and actual size gauges, $\frac{1}{8}$, $\frac{3}{16}$, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$ inch.

No. **1063** Price .. .. .. 3/4 each.

DOUBLE CIRCULAR WIRE GAUGE

Illustration full size.



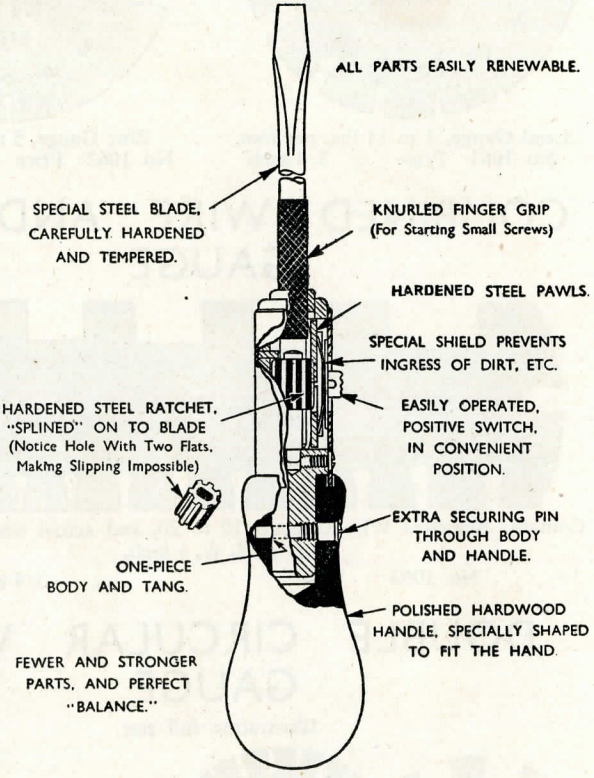
No. **1066**

Double Circular Wire Gauge giving sizes 1 to 26, complete in Leather Case.

Price .. 5/– each

BRITISH
RATCHET SCREWDRIVER

This is the Ratchet Screwdriver which we are now supplying to Government Departments, and which has displaced the foreign article.


ALL PARTS EASILY RENEWABLE.
SPECIAL STEEL BLADE, CAREFULLY HARDENED AND TEMPERED.
KNURLED FINGER GRIP (For Starting Small Screws)
HARDENED STEEL PAWLS.
SPECIAL SHIELD PREVENTS INGRESS OF DIRT, ETC.
HARDENED STEEL RATCHET, "SPLINED" ON TO BLADE (Notice Hole With Two Flats, Making Slipping Impossible)
EASILY OPERATED, POSITIVE SWITCH, IN CONVENIENT POSITION.
EXTRA SECURING PIN THROUGH BODY AND HANDLE.
ONE-PIECE BODY AND TANG.
POLISHED HARDWOOD HANDLE, SPECIALLY SHAPED TO FIT THE HAND.
FEWER AND STRONGER PARTS, AND PERFECT "BALANCE."

No. 950

The above section shows the many points of superiority.

PRICES:

No. 950	2	3	4	5	6 in. blade.
	1/9	1/10	2/–	2/2	2/3 each.

Packed in half-dozens

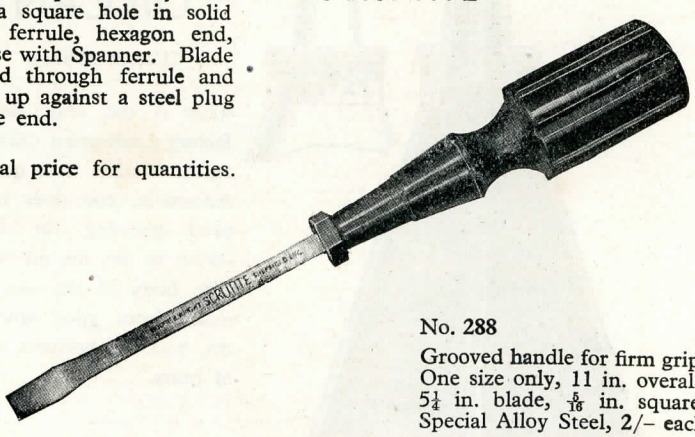
● MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

BIG NEW SCREWDRIVER

This is a Screwdriver of extra robustness and rigidity. It has a square blade, fitted into a square hole in solid Steel ferrule, hexagon end, for use with Spanner. Blade pinned through ferrule and butts up against a steel plug at the end.

Special price for quantities.

"SCRUTITE"

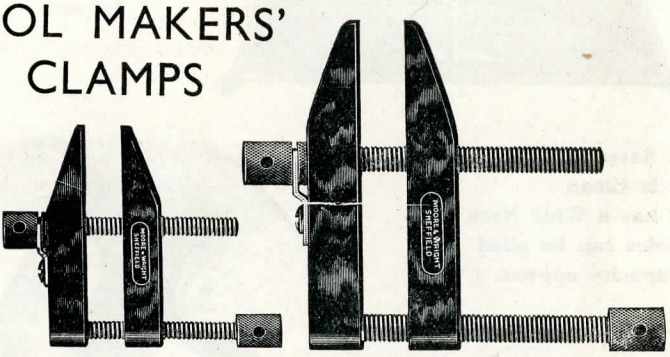


No. **288**

Grooved handle for firm grip. One size only, 11 in. overall, 5¼ in. blade, $\frac{5}{16}$ in. square. Special Alloy Steel, 2/– each

Packed one in a carton

TOOL MAKERS' CLAMPS



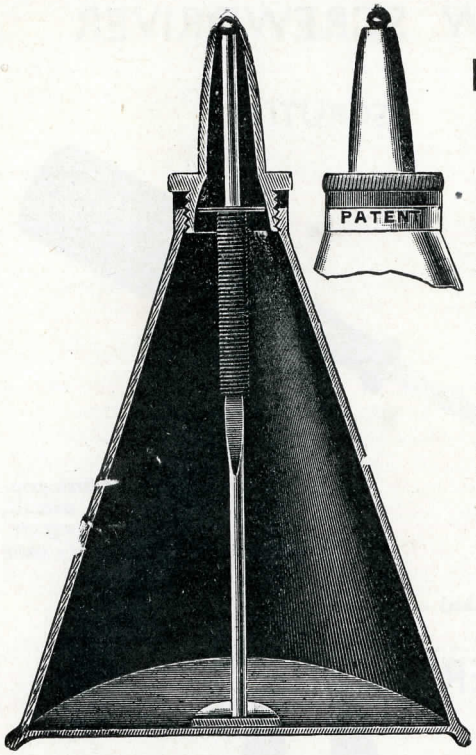
These Clamps are made of steel, case hardened and ground flat on the faces. **They** are fitted with a device preventing the jaws falling together.

	Length of Jaws.	Size of Jaws.	Opening.	Price of one Clamp.
No. **410** ..	2 in.	$\frac{5}{16}$ in. sq.	1 in.	2/6 each.
No. **411** ..	3 in.	$\frac{7}{16}$ in. „	1½ in.	3/– „
No. **413** ..	5 in.	$\frac{11}{16}$ in. „	3½ in.	6/9 „

N.B.—If a "pair" of clamps is ordered, we send TWO clamps.

Packed one clamp in a box.

MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND



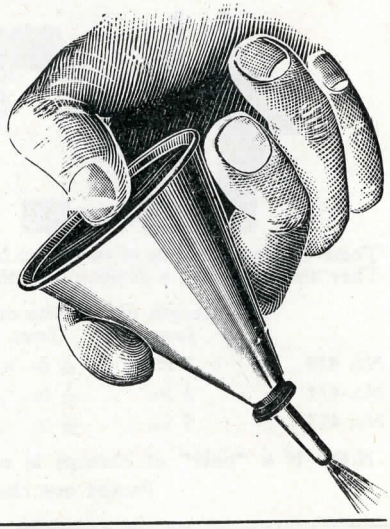
MOORE'S LEAKPROOF OILCAN

(Patent 15893)

This is the only satisfactory Leak-proof Oilcan on the Market. It is quite automatic, and does not need pressing on any object to get the oil out. The body of the can is made from good sound tin, and the bottoms are of brass.

No. **250**
3¼ in. × 2¼ in.
1/2 each

It Saves Oil
It is Clean
It has a Wide Neck
Holes can be oiled
Capacity approx. ⅕ pint.



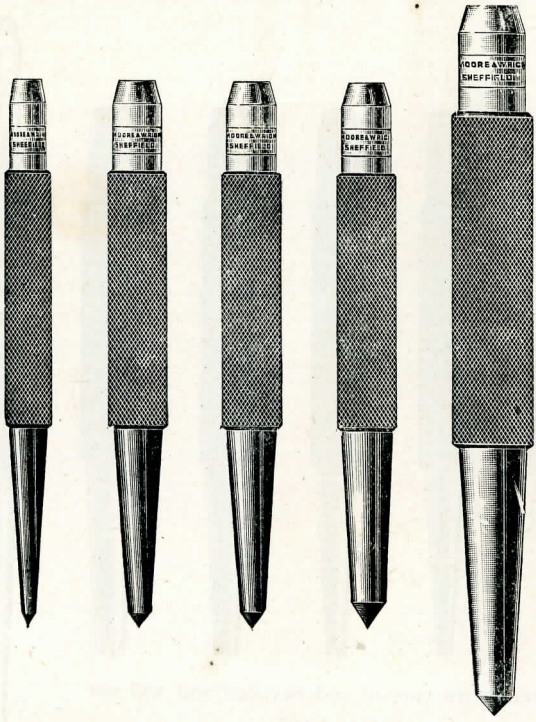
No. **253** as No. 250, but without patent attachment.
10d. each.

SPECIAL PRICE FOR ONE GROSS LOTS

Packed in 1 dozen and 3 dozen boxes.

MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

CAST STEEL CENTRE PUNCHES



No. 81A 81B 81C 81D 83

As will be seen from the illustrations, these punches have been improved in shape and finish and now stand equal to any make whatsoever. Their size and shape has been dictated by long experience, and we offer them to-day as the best we have ever made.

No. 81A	$\frac{1}{8}$ in. at point	$\frac{5}{16}$ in. dia.	just under 4 in. long.
No. 81B	$\frac{5}{32}$ in. „	$\frac{3}{8}$ in. dia.	„ 4 in. „
No. 81C	$\frac{3}{16}$ in. „	$\frac{7}{8}$ in. dia.	„ 4 in. „
No. 81D	$\frac{1}{4}$ in. „	$\frac{8}{8}$ in. dia.	„ 4 in. „

Price .. .. **6d.** each ; **6/–** doz. ; **66/–** per gross

Special Price for 5 gross lots

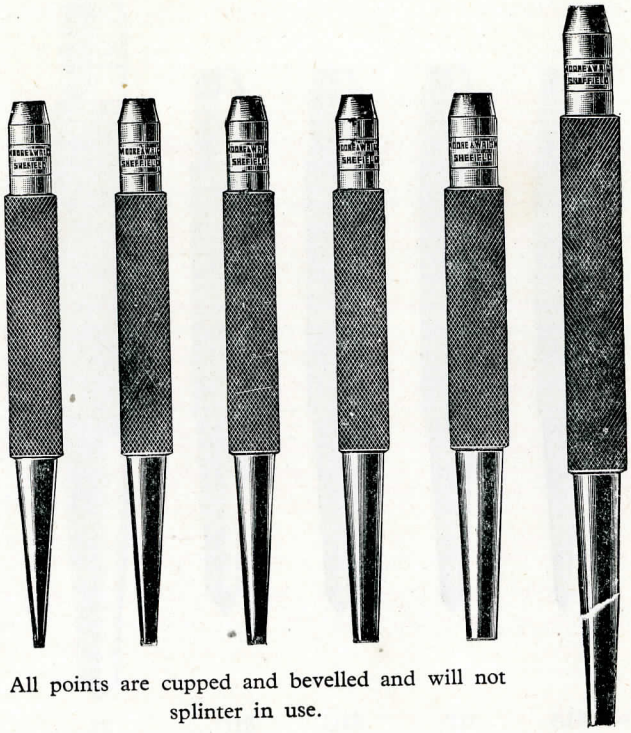
Packed in 1 dozens

No. **83**	5 in. × $\frac{1}{2}$ in.	**1/–** each ; **12/–** per doz.
No. **85**	6 in. × $\frac{5}{8}$ in.	**1/8** each ; **19/–** „
No. **86**	7 in. × $\frac{3}{4}$ in.	**1/11** each ; **22/–** „

No. **81X** 1 doz. assorted No. 81 on card .. **6/6** per card

Packed in $\frac{1}{2}$ dozens

CAST STEEL NAIL SETS



All points are cupped and bevelled and will not splinter in use.

No. 82A	82B	82C	82D	82E	82F

No. 82A	$\frac{1}{16}$ in. at point	.. ..	$\frac{5}{16}$ in. dia., just under 4 in. long.
No. 82B	$\frac{3}{32}$ in. ,,	.. ..	,, ,, ,,
No. 82C	$\frac{1}{8}$ in. ,,	.. ..	,, ,, ,,
No. 82D	$\frac{5}{32}$ in. ,,	.. ..	,, ,, ,,

Price **6d.** each ; 5/6 per doz. ; 63/- per gross

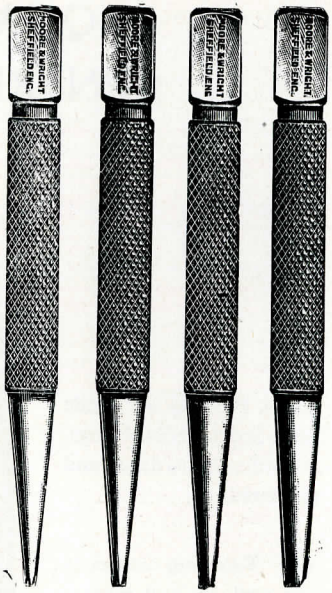
No. 82X	1 dozen of above on card, assorted. **6**/- per card.
No. 82E	$\frac{3}{16}$ in. at point, $\frac{3}{8}$ in. dia., **6d.** each ; **69**/- per gross.
No. 82F	$\frac{3}{16}$ in. at point, $\frac{3}{8}$ in. dia., 5 in. long, **7d.** each ; **7**/- dozen.

Packed in 1 dozens

Special price for 5 gross lots.

SQUARE HEAD NAIL SETS

No. 352



A B C D

These Nail Sets are made out of a Special Nickel Steel and will not splinter in use.

The points are cupped and bevelled.

The Knurling will be found clean and well cut. The diamond form gives a firm grip and yet does not chafe the skin.

They are made in four sizes like our other Nail Sets, viz. :—

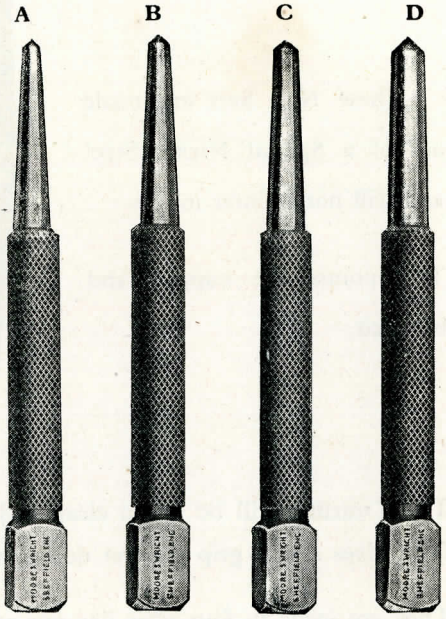
	Point.	Body.	Head.	Length.	
352A	$\frac{1}{16}$	$\frac{11}{32}$nd	$\frac{3}{8}$ sqr.	4 in.	Price 6/– doz.
B	$\frac{3}{32}$	,,	,,	,,	6d. each.
C	$\frac{1}{8}$	,,	,,	,,	Gross lots 69/–
D	$\frac{5}{32}$	,,	,,	,,	per gross.

Packed in 1 dozens

Special price for 5 gross lots.

SQUARE HEAD CENTRE PUNCHES

No. 351



These Punches are made from Special Nickel Steel, scientifically hardened and tempered.

The Knurling is clean and well cut and gives a firm grip without chafing the skin.

Made in four sizes as shown in illustration.

No. 351

	Point.	Body.	Head.	Length.	Price.
A	$\frac{1}{8}$″	$\frac{11}{32}$″	$\frac{3}{8}$″ square	4″	**6d.** each.
B	$\frac{5}{32}$″	$\frac{11}{32}$″	$\frac{3}{8}$″ ,,	4″	**6/–** per doz.
C	$\frac{3}{16}$″	$\frac{11}{32}$″	$\frac{3}{8}$″ ,,	4″	**69/–** per gross
D	$\frac{1}{4}$″	$\frac{11}{32}$″	$\frac{3}{8}$″ ,,	4″	in gross lots.

Packed in 1 dozens

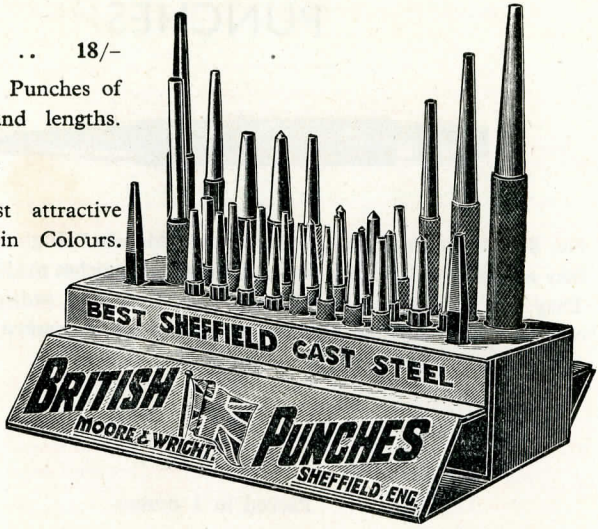
Special price for 5 gross lots.

NEW PUNCH STAND

No. **185** 18/–

Consisting of 30 Punches of assorted sizes and lengths.

This is a most attractive Stand printed in Colours.

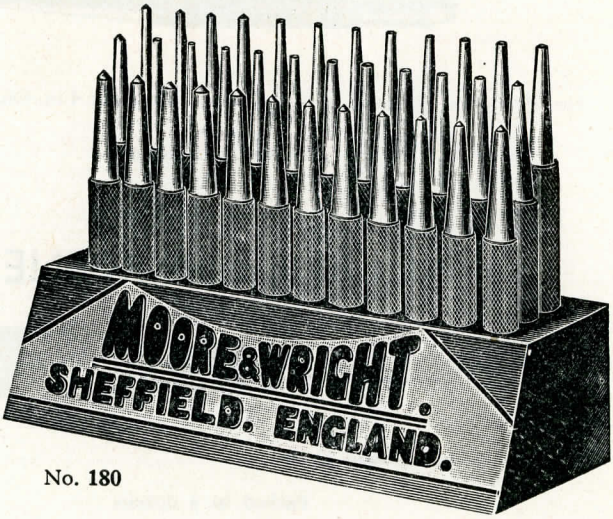


NAIL SETS & CENTRE PUNCHES ON STAND

Nail Sets and Centre Punches are supplied on Oak Stand, as shown, containing 3 dozen assorted, at the price given below.

1½ doz. Nail Sets and 1½ doz. Centre Punches, assorted, Stand included.

Price .. 17/6



No. **180**

"MOORITE" STEEL CENTRE PUNCHES

No. **80** These Punches are made from "Moorite" High Speed Steel, and they will wear as long as a dozen of any other punches made from cast steel. They will keep a fineness of point impossible with ordinary steels—with care will last a lifetime. Every genuine punch is marked "Moorite High Speed Steel." Made in same sizes as No. 81.

11/– doz. ; **1**/– each

120/- per gross.

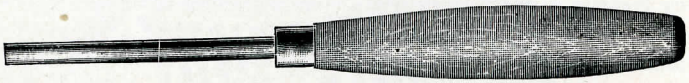
Packed in 1 dozens

PRICK PUNCH

No. **79** $\frac{9}{32}$ in. diameter, $\frac{3}{32}$ in. at point, just under 4 in. long .. **6d.** each

Packed in 1 dozens

SCRAPER SHARPENERS



No. **290** Joiners, round blade .. .. Price **9d.** each

Packed in $\frac{1}{2}$ dozens

OCTAGON
CAST STEEL CENTRE PUNCHES

Description and sizes same as 81.

No. **261** The Punches shown herewith are made out of steel specially made to withstand shock. They are nicely machined, oil tempered, and the quality of the steel is brought out as well as skill in hardening and tempering can do it.

Size A. $\frac{5}{16}$ in. diameter. B, C and D $\frac{3}{8}$ in. diameter.

	A	B	C	D	
Size at point	$\frac{1}{8}$ in.	$\frac{5}{32}$ in.	$\frac{3}{16}$ in.	$\frac{1}{4}$ in.	**5d.** each

5/– per dozen, **57/–** per gross.

Special price for larger quantities.

No. **262** $\frac{1}{2}$ in. diameter, 5 in. long .. .. **8d.** each

Packed in 1 dozens

OCTAGON
CAST STEEL NAIL SETS

Description and sizes same as 82.

No. **272** These Nail Sets are made of the same grade of steel as the Centre Punches shown above, oil hardened, points concave, and all of a very handy size.

All sizes $\frac{5}{16}$ in. diameter.

	A	B	C	D	
Size at point	$\frac{1}{16}$ in.	$\frac{3}{32}$ in.	$\frac{1}{8}$ in.	$\frac{5}{32}$ in.	**5d.** each

5/– per dozen, **57/–** per gross

Special price for larger quantities

Packed in 1 dozens

OCTAGON
MOTOR PUNCHES OR DRIFTS

A good reliable article made out of Sheffield Cast Steel. Thoroughly guaranteed.

No. **263** $\frac{3}{8}$ in. dia., 6 ins. long .. .. Price **8d.** each

No. **264** $\frac{1}{2}$ in. dia., 7 ins. long .. .. „ **10d.** „

Packed in $\frac{1}{2}$ dozens

PARALLEL PIN PUNCHES

No. 161

Length.			ins.		
4 ins.	A	Size	$\frac{9}{32} \times \frac{3}{32}$	**7d.**	each
4 ins.	B	„	$\frac{9}{32} \times \frac{1}{8}$	**6d.**	„
4 ins.	C	„	$\frac{5}{16} \times \frac{3}{16}$	**6d.**	„
4 ins.	D	„	$\frac{3}{8} \times \frac{1}{4}$	**6d.**	„
6 ins.	E	„	$\frac{1}{2} \times \frac{5}{16}$	**1/3**	„

Set of 5, as above **3/4**

On Card as shown.

Packed, A, B, C, D, in dozens.

E in ½ dozens

MOTOR PUNCHES

No. **87**

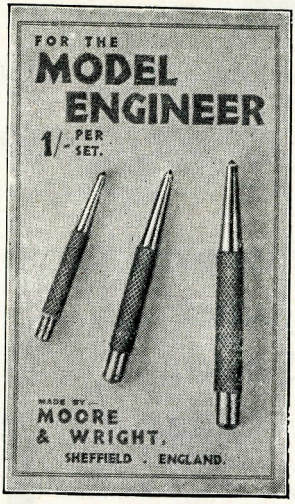
No. **88**

These Punches have been introduced to meet the growing demand for a reliable article for knocking out taper pins, etc. They are made of cast steel, are nicely knurled in the middle for a grip, are hardened both ends, and the size will be found very handy.

No. **87**	Size, 6 ins. long, $\frac{3}{8}$ in. diameter	**10d.**	each
No. **88**	Size, 7 ins. long, ½ in. diameter	**1/–**	„
No. **188**	Size, 8 ins. long, $\frac{5}{8}$ in. diameter	**1/3**	„

Packed in ½ dozens

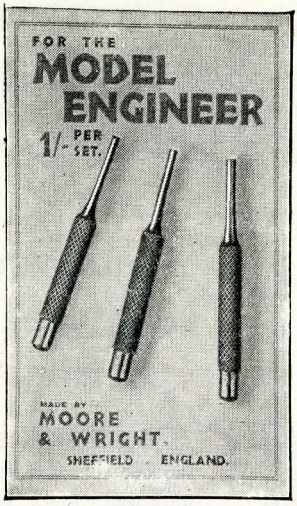
SMALL PUNCHES for Model Makers



No 265

Set of 3 Centre Punches .. 1/- per Set

1 each ..	A	B	C
	2¼″	2⅛″	3⅛″ long
	5/64″	⅛″	9/64″ at point
	3/16″	¼″	3/16″ dia.



No 266

Set of 3 Pin Punches .. 1/- per Set

1 each ..	A	B	C
	2¼″	2⅜″	2⅛″ long
	1/16″	5/64″	1/32″ at point
	1/16″	1/16″	1/16″ dia.

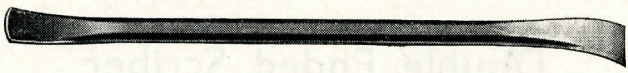
No 267

Set of 3, larger .. 1/- per Set

1 each ..	A	B	C
	2¾″	2⅞″	3″ long
	3/32″	7/64″	1/16″ at point
	¼″	¼″	¼″ dia.

NEW CARBON SCRAPER

For Motor Cycles



No. 90

This is a new design of Carbon Scraper designed to be used with a Pull-cut. To use, pull the piston to top dead centre, insert Scraper through spark plug hole, using round end of Scraper first to loosen carbon and finish off with flat end. A most useful tool made from best Chrome Vanadium Alloy Steel, which ensures a lasting cutting edge.

No. 90 10 ins. long, one size only .. .. 10d. each

Packed in ½ dozens

No. 90x Card containing six .. .. 5/- per card

MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

MACHINIST'S SCRIBER

Made out of high grade tool steel, properly tempered, knurled and finished. Being knurled right down it ensures a firm hold.

No. 72 Size, 4½ ins. long, 3/16 in. diameter .. .. .. **6d.** each

Improved Engineer's Scriber

As will be seen from the cut this is a much improved tool, as it affords a firm hold just where needed.

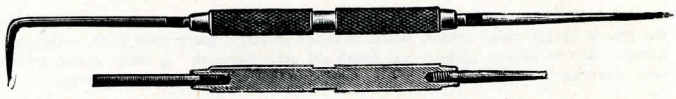
No. **75** Length, 7 ins. **7/6 per** doz. ; **8d.** each

Improved Joiner's Striking Knife

This Striking Knife meets the demand for a good tool which can be more securely held in the hand than the usual pattern. It is knurled all the way down, and is a useful tool in every way.

No. **74** Length, 7 ins., **7/6** per doz. ; **8d.** each

Double Ended Scriber



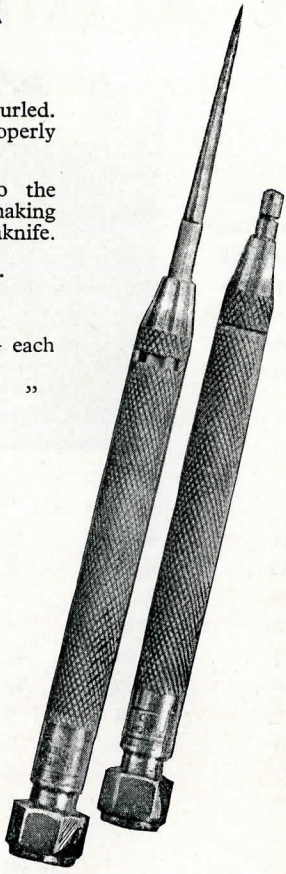
No. **77** A superior article, length 7 ins., **11/6** per dozen, **1/–** each.

All above packed in dozens

MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

POCKET SCRIBER

No. 70



This Tool is made from steel tubing, knurled. The Scriber is made from best quality steel, properly tempered, and is held by a knurled chuck.

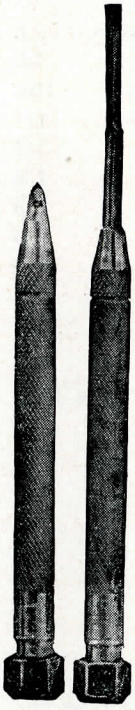
The Scriber is reversible, telescoping into the handle, and is held by a turn of the chuck, making it quite as safe to carry in the pocket as a penknife.

The hexagon prevents it rolling off the bench.

Indispensable to every mechanic.

Price .. .. 1/– each

Scribers only, to replace .. .. 2d. „



POCKET SCREW DRIVER

No. 76

This Tool is made from steel tubing, knurled. The butt of the blade fits a solid lock in the tube, which prevents it from turning. It is held from coming out by a slight turn of the chuck.

To carry in the pocket, reverse the blade, insert it in the handle, and give a slight turn of the chuck to keep it there. It takes no more room than a penknife. The blades are made of best cast steel, and are properly hardened and tempered.

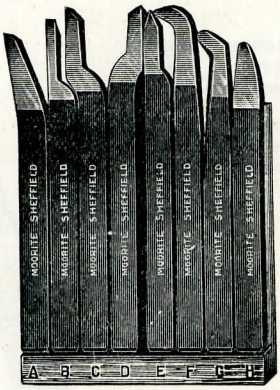
Price .. .. 1/– each

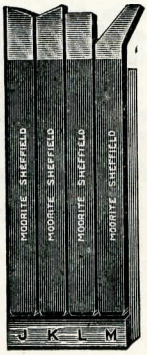
Blades only, to replace .. .. .. 2d. „

Packed in dozens

LATHE TOOLS

Sets of any number of Tools, or Tools of any other shapes can be supplied.





Sold either in sets of Eight or Twelve, or singly.

All shapes shown the same price.

Special shapes at special prices.

CAST STEEL

No.	Square	Length	Set of Eight	Set of Twelve	Each
430	$\frac{1}{4}$ in.	3 in.	4/–	6/–	**7d.**
431	$\frac{5}{16}$ in.	4 in.	6/6	9/9	**11d.**
432	$\frac{3}{8}$ in.	4 in.	7/6	11/3	1/–
433	$\frac{7}{16}$ in.	$4\frac{1}{4}$ in.	9/–	13/6	1/2
434	$\frac{1}{2}$ in.	$4\frac{1}{2}$ in.	12/–	18/–	1/6
435	$\frac{9}{16}$ in.	5 in.	17/–	25/6	2/3
436	$\frac{5}{8}$ in.	5 in.	20/–	30/–	2/6
437	$\frac{3}{4}$ in.	6 in.	26/–	39/–	3/3
438	1 in.	7 in.	58/–	87/–	7/6

HIGH SPEED STEEL

No.	Square.	Length.	Set of Eight	Set of Twelve	Each
440	$\frac{1}{4}$ in.	3 in.	7/6	11/3	1/–
441	$\frac{5}{16}$ in.	4 in.	11/–	16/6	1/5
442	$\frac{3}{8}$ in.	4 in.	14/–	21/–	1/10
443	$\frac{7}{16}$ in.	$4\frac{1}{4}$ in.	17/–	25/6	2/2
444	$\frac{1}{2}$ in.	$4\frac{1}{2}$ in.	20/–	30/–	2/9
445	$\frac{9}{16}$ in.	5 in.	29/–	43/6	3/9
446	$\frac{5}{8}$ in.	5 in.	38/–	57/–	5/–
447	$\frac{3}{4}$ in.	6 in.	52/–	78/–	6/9
448	1 in.	7 in.	110/–	165/–	14/–

A HANDSOME STAND in OAK with Gilt Lettering to hold 1 Set No. 430 is given away with an Order for Six Sets. STANDS ONLY, 2/– each

MOTOR BEARING SCRAPERS

REGD. NOS. 726565/6/7

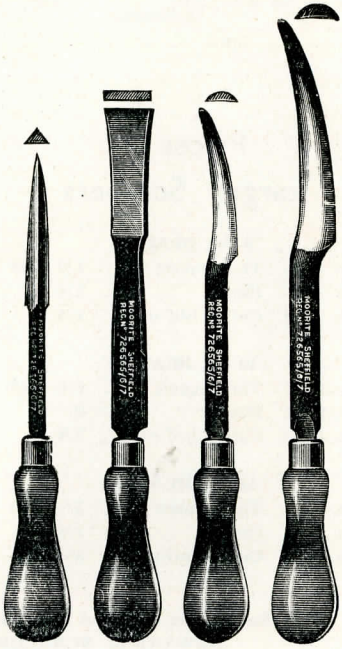
These Scrapers are the handiest and most convenient to use that have ever been made. The steel is the finest Sheffield manufacture, and the most skilled labour available is employed in their production. Every detail has been studied, even down to the shape and size of the handles, which are shaped to fit the hand perfectly.

The crank on the half-rounds enables them to be used with ease in any position, and all corners which come into contact with the hand have been rounded off. The half-round and three-square blades are hollow-ground to ensure a keen but firm edge. They carry our usual guarantee and will be found durable and delightful in use.

156A	Three-square 4″ blade	1/3	each
156B	Flat 4″ „	1/3	„
156C	Half-round Curved 4″ „	1/3	„
156D	„ „ 5″ „	1/6	„
156	The Set of Four	5/3	
156X	„ „ on card	5/9	card.

157A	Three-square 5½″ blade	1/6	each
157B	Flat 6″ „	1/6	„
157C	Half-round Curved 6″ „	1/9	„
157D	„ „ 8″ „	2/–	„
157	The Set of Four	6/9	
157X	„ „ on card	7/3	card

Packed in ¼ dozens and in Sets.



A B C D

WOOD HANDLED ENGINEERS' SCRAPERS

No. 96A	Three-square 4 in. blade	1/- each.
No. 96B	Flat 4 in. blade ..	1/- „
No. 96C	Curved 4 in. blade..	1/- „
No. 96D	Curved 5 in. blade..	1/3 „

No. 96 4/3 per set of Four.

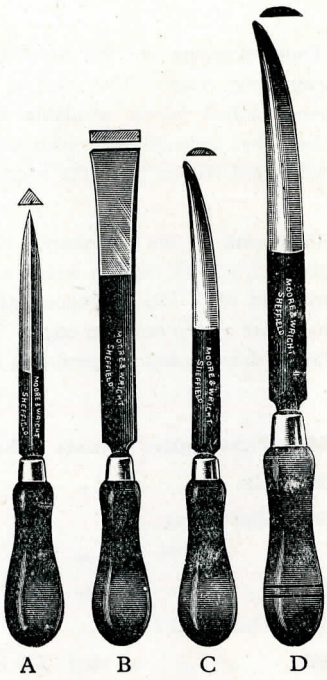
No. 97A	Three-square 5½ in. blade	1/3 each.
No. 97B	Flat 6 in. blade ..	1/3 „
No. 97C	Curved 6 in. blade..	1/3 „
No. 97D	Curved 8 in. blade..	1/9 „

No. 97 5/6 per set of Four.

No. 98 Set of 4 half-round curved, from 4 to 8 in. .. 5/3 per Set

No. 95 Set of 3 { three-square, flat, half-round } 4 in.

Price .. 3/-



Prices of Larger Scrapers

8 in. BLADE.

No. 99A	Three-square ..	1/9 each
No. 99B	Flat	1/6 „
No. 97D	Curved half-round	1/9 „

10 in. BLADE.

No. 100A	Three-square ..	2/6 each
No. 100B	Flat	2/- „
No. 100D	Curved half-round	2/6 „

12 in. BLADE.

No. 101A	Three-square ..	3/- each
No. 101B	Flat	2/6 „
No. 101D	Curved half-round	3/- „

SCRAPERS Mounted on Cards

		Each
No. 96x	Set of 4 as shown, three 4 in., one 5 in., on attractive card	4/9
No. 97x	Set of 4 ditto, one 5½ in., two 6 in., one 8 in., on attractive card	6/-
No. 98x	Set of 4 half-round, curved, from 4 in. to 8in., on card ..	5/9
No. 95x	Set of three 4 in., three square, flat, and half-round, on card	3/6

All the above have Best Quality Polished Red Handles.

OUR Scrapers are all forged from NEW Cast Steel Bar, and we request you to **BEWARE of SCRAPERS made out of OLD FILES**

Packed in ¼ dozens and in Sets.

THE "MOORITE" SCRAPER

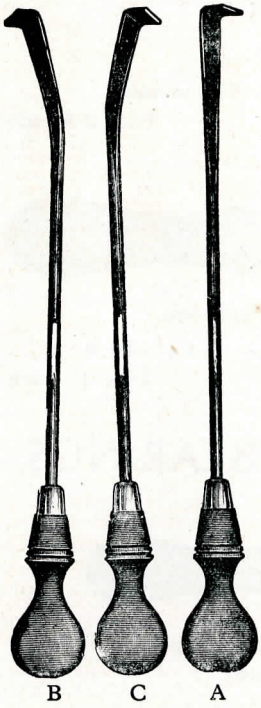
No. 258D

NOW GREATLY IMPROVED AND MADE 1 in. LONGER

These Scrapers are made from a Special Tungsten-Vanadium Alloy Steel specially produced for the purpose of Scrapers where the cutting edge must remain sharp for long periods. **The edge on these tools will remain sharp without grinding for years.** Without exaggeration we confidently claim that no Scrapers have ever been produced having equal qualities.

		4 in.	6 in.	8 in. blade
No. 258D	Curved Half-round	1/–	1/6	2/– each
„ 258X	Card containing 1 of each size	..	..	4/6 per card

Packed in ¼ dozens



B C A

CARBON SCRAPERS OR PISTON HEAD SCRAPERS

The Scrapers are a high grade Tool at a reasonable price. The blades are made from finest quality Silver Steel Rod and are guaranteed to hold a good scraping edge.

The shanks are left springy.

The blades are fitted with oval handles, making them easy to use, as they will not readily turn or slip in the hand during use.

They are made in three shapes, i.e., straight, left-hand bend and right-hand bend as detailed below.

No. 94A	Straight Blade	1/3 each
No. 94B	Left-hand bend	
No. 94C	Right-hand bend	

No. 94

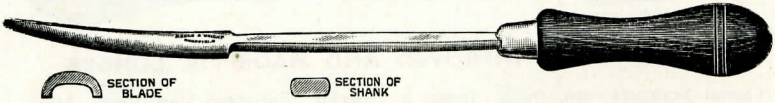
Set of three Scrapers .. .. 3/6 Set

Packed in ¼ dozens and in sets

THE "ERECTORS" SCRAPER

See this mark on each Scraper

CHROME MOORE & WRIGHT N°257 SHEFFIELD ENG VANADIUM



No. **257** (replacing No. **259** now abandoned)

This Scraper is the result of many years experience in making high quality Scrapers and embodies all those delicate refinements which are appreciated by the skilled craftsman. It will cut without chatter and remove that last half-thou. with artistic ease.

The flat section of the shank has the edges rounded and gives a pleasant grip for the side movement. The Steel is the World's best, being made in Sheffield, and our guarantee goes with every Tool.

Each Scraper is honed and sent out ready for use.

No. **257** $4\frac{3}{8}$ in. blade, $5\frac{1}{2}$ in. shank, $5\frac{1}{8}$ in. handle, 15 in. overall

Price **3/6** each

No. **256** Same quality as No. 257 above, but flat, as shown.

$3\frac{1}{2}$" blade, $4\frac{3}{4}$" shank, 5" handle, $13\frac{1}{4}$" overall.

Price **3/-** each

NEW SCRAPER FOR BEARINGS

Forged out of solid bar, this Scraper has three cutting edges. It is forged hollow, and is easily sharpened.

No. **533** .. .. Price **1/6** each

TUBE HANDLED SCRAPERS

A Triangular, hollow ground on sides.
B Flat scraper for surface work.
D Curved half-round for use in bearings, etc.

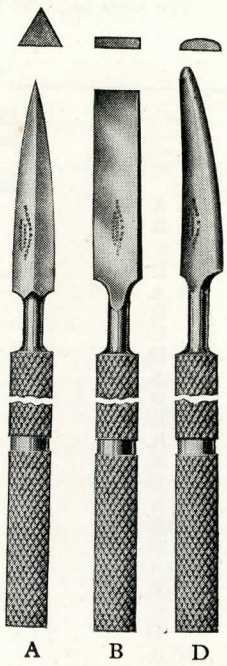
The illustrations show a very handy set of tool makers' scrapers. The handles are light and strong, being made of solid drawn steel tubing knurled for a grip. The blades are made from best cast steel ground after hardening. The shapes are flat, three-square and half-round curved.

Set No. **91** are tool makers' scrapers and will be found useful for all light accurate work.

Set Nos. **92** and **93** are larger, and are suitable for engineers and particularly for motor car work.

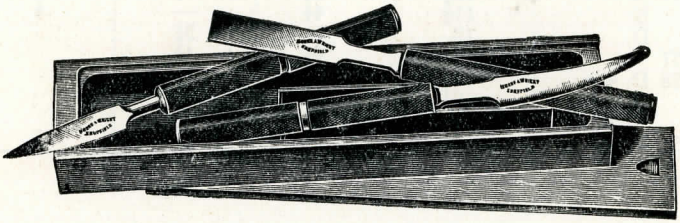
			Per Set of 3 wrapped
No. **91**	6 in., any shape	**1/8** each	**5/–**
No. **92**	10 in.	„ **2/–** „	**6/–**
No. **93**	12 in.	„ **2/6** „	**7/6**

If in wooden boxes the price is **1/–** per Set extra, see below.



Packed in ¼ dozens and in sets

No. **91X**	Set of three 6″ in wooden box, as illustrated	.. **6/–** per set.
No. **92X**	„ 10″ „ „	.. **7/–** „
No. **93X**	„ 12″ „ „	.. **8/6** „

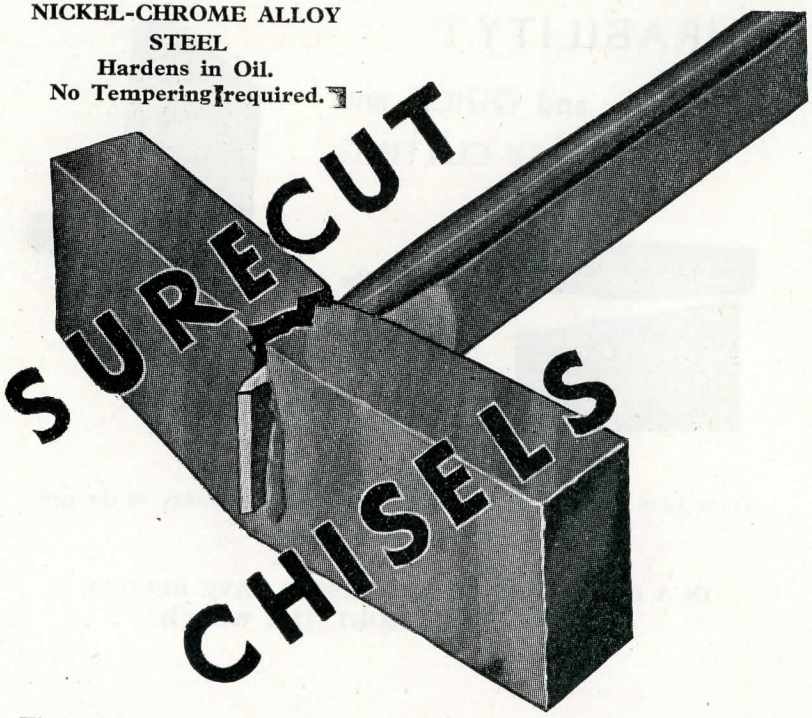


DIMENSIONS OF SCRAPERS

The sizes must be taken as approximate as slight variations occur.

	Overall length.	Length of Blade.	Length of Cutting Edge.	Width of Cutting Edge.
	inches.	inches.	inches.	inches.
96 A.	8	$4\frac{1}{2}$	$2\frac{1}{4}$	
B.	$8\frac{1}{4}$	$4\frac{1}{4}$	—	$\frac{9}{16}$
C.	$7\frac{1}{2}$	4	$1\frac{3}{4}$	
D.	$8\frac{3}{4}$	5	2	
97 A.	10	$5\frac{3}{4}$	3	
B.	$10\frac{3}{4}$	$6\frac{1}{4}$	—	$\frac{13}{16}$
C.	$10\frac{1}{2}$	6	$3\frac{1}{4}$	
D.	14	$8\frac{1}{4}$	$4\frac{1}{4}$	
99 A.	$13\frac{1}{2}$	$8\frac{1}{4}$	$4\frac{1}{4}$	
B.	13	$7\frac{1}{2}$	—	1
D.	14	$8\frac{1}{4}$	$4\frac{1}{4}$	
100 A.	16	$10\frac{3}{4}$	$5\frac{1}{2}$	
B.	$15\frac{1}{2}$	10	—	$1\frac{1}{4}$
D.	$15\frac{1}{2}$	$10\frac{1}{2}$	$5\frac{1}{2}$	
101 A.	$17\frac{1}{2}$	12	6	
B.	$17\frac{1}{4}$	$11\frac{1}{2}$	—	$1\frac{3}{8}$
D.	$18\frac{1}{2}$	12	6	
156 A.	$8\frac{1}{2}$	$4\frac{1}{2}$	2	
B.	$8\frac{1}{4}$	$4\frac{1}{4}$	—	$\frac{9}{16}$
C.	$7\frac{3}{4}$	$4\frac{1}{4}$	2	
D.	9	$5\frac{1}{4}$	$2\frac{1}{4}$	
157 A.	10	$5\frac{3}{4}$	3	
B.	$10\frac{3}{4}$	$6\frac{1}{4}$	—	$\frac{13}{16}$
C.	$10\frac{1}{4}$	$6\frac{1}{4}$	3	
D.	$13\frac{3}{4}$	$8\frac{1}{4}$	$4\frac{1}{2}$	
533	$10\frac{3}{4}$	$6\frac{3}{4}$	$2\frac{3}{4}$	
94 A.B.D.	$10\frac{1}{2}$	$7\frac{1}{4}$	—	$\frac{7}{16}$
91 A.	$7\frac{3}{8}$	$2\frac{7}{8}$	$1\frac{7}{8}$	
B.	7	$2\frac{9}{16}$	—	$\frac{3}{8}$
D.	$7\frac{3}{8}$	$2\frac{7}{8}$	$1\frac{7}{8}$	
92 A.	$9\frac{5}{8}$	$4\frac{1}{8}$	3	
B.	$9\frac{5}{8}$	$4\frac{1}{8}$	—	$\frac{11}{16}$
D.	10	$4\frac{1}{2}$	$3\frac{3}{8}$	
93 A.	$11\frac{3}{4}$	$4\frac{3}{4}$	$3\frac{5}{8}$	
B.	$11\frac{5}{8}$	$4\frac{5}{8}$	—	$\frac{7}{8}$
D.	12	5	$3\frac{7}{8}$	
257	15	$9\frac{7}{8}$	$4\frac{3}{8}$	
258 D. 4 in.	$7\frac{1}{4}$	4	$1\frac{1}{2}$	
6 in.	$9\frac{1}{2}$	6	2	
8 in.	$11\frac{1}{2}$	8	$2\frac{1}{4}$	
256	$13\frac{1}{4}$	$3\frac{1}{2}$	—	$1\frac{1}{8}$

NICKEL-CHROME ALLOY STEEL
Hardens in Oil.
No Tempering required.



These Chisels are made from a new non-tempering Nickel-Chrome Alloy Steel.

They can be re-sharpened with a file but are so tough that they will do the hardest work.

The flat section gives a firm grip, and they will not splinter under severe service.

	Size of Stock.	Width of Cut.	Length.	
No. **319** ..	$\frac{1}{4}'' \times \frac{5}{32}''$ ..	$\frac{5}{16}''$ ..	4″ ..	**7d.** each
No. **320** ..	$\frac{5}{16}'' \times \frac{3}{16}''$ ..	$\frac{3}{8}''$ ..	$4\frac{3}{8}''$ ..	**8d.** „
No. **321** ..	$\frac{3}{8}'' \times \frac{7}{32}''$ ..	$\frac{7}{16}''$ ..	$5\frac{1}{4}''$ ..	**9d.** „
No. **322** ..	$\frac{1}{2}'' \times \frac{5}{16}''$ ..	$\frac{5}{8}''$ ..	6″ ..	**10d.** „
No. **323** ..	$\frac{5}{8}'' \times \frac{7}{16}''$ ..	$\frac{3}{4}''$ ..	7″ ..	**1/2** „
No. **324** ..	$\frac{3}{4}'' \times \frac{1}{2}''$ ..	$\frac{7}{8}''$ ..	8″ ..	**1/8** „
No. **325** ..	$\frac{7}{8}'' \times \frac{9}{16}''$ ..	1″ ..	9″ ..	**2/3** „
No. **326** ..	$1'' \times \frac{5}{8}''$ ..	$1\frac{1}{8}''$ ..	$9\frac{1}{2}''$ ..	**2/9** „

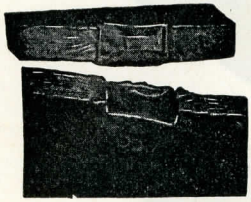
Cross-cut Chisels can be supplied in Nos. 321, 322, 323, 324 at **2½d.** each extra.

These Chisels combine the qualities of being sure-cutting and splinterless, and may be sharpened with a smooth file. They work with speed and without fuss, and improve with work.

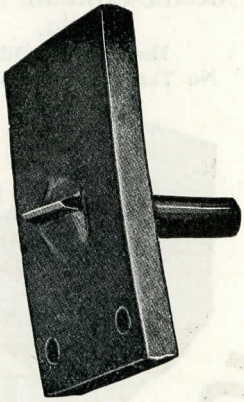
MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

DURABILITY !

and QUICK and EASY CUTTING



Notice the CLEAN CUT through the metal



These Cuts illustrate the cutting properties and durability of the new Chisels, Nos. **319** and up.

IN A FEW YEARS THESE CHISELS HAVE BECOME FAMOUS THROUGHOUT THE WORLD.

Forging and Hardening Instructions for "SURE-CUT" CHISELS

TO HARDEN—

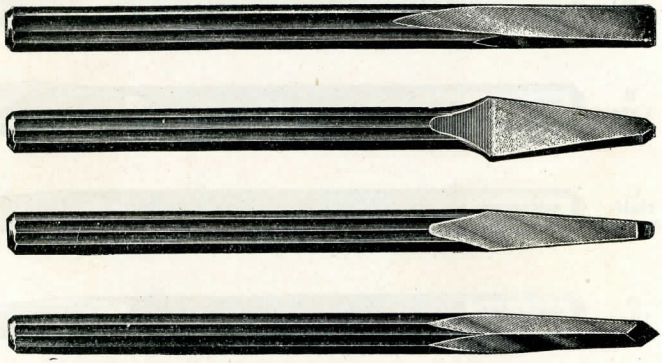
Heat to 830° C. (Bright Cherry Red) and quench in Oil.

FORGE at same heat.

It is very important that the above Temperature be adhered to. It neither forges nor hardens well at lower or higher Temperatures.

● MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

OCTAGON CAST STEEL CHISELS



Made from Sheffield **First Quality Cast Steel,** forged and hardened by skilled labour, and guaranteed in every way.

	Diameter.	Length.	Cut of Flat Chisels.	Price.	
No. 229	¼ in. ..	4 in. ..	$\frac{6}{16}$ in. ..	**3½d.** each	
No. 230	$\frac{5}{16}$ in. ..	4½ in. ..	⅜ in. ..	**4d.** „	All Shapes
No. 231	⅜ in. ..	5½ in. ..	$\frac{7}{16}$ in. ..	**5d.** „	the same
No. 232	½ in. ..	6 in. ..	$\frac{9}{16}$ in. ..	**6d.** „	price to
No. 233	$\frac{5}{8}$ in. ..	7 in. ..	¾ in. ..	**7½d.** „	½ inch,
No. 234	¾ in. ..	8 in. ..	⅞ in. ..	**9d.** „	above ½ in.
No. 235	⅞ in. ..	9 in. ..	1 in. ..	**1/–** „	B. C. & D. shapes
No. 236	1 in. ..	9½ in. ..	1⅛ in. ..	**1/4** „	10% extra.

OTHER SIZES AND LENGTHS

Price Each

Dia.	4	5	6	8	10	12	15	18	24″ long
¼″ ..	—	—	**4½d.**	—	—	—	—	—	—
$\frac{5}{16}$″ ..	—	—	—	—	—	—	—	—	—
⅜″ ..	**4½d.**	—	**5d.**	**6d.**	—	—	—	—	—
½″ ..	**5d.**	**5½d.**	**6d.**	**6½d.**	**8d.**	**9d.**	**11d.**	**1/2**	—
$\frac{5}{8}$″ ..	—	—	—	**8½d.**	**10d.**	**10½d.**	**1/1**	**1/3**	**1/8**
¾″ ..	—	—	—	**9d.**	**1/–**	**1/3**	**1/5**	**1/6**	**1/10**
⅞″ ..	—	—	—	**1/–**	**1/3**	**1/6**	**1/8**	**1/9**	**2/4**
1″ ..	—	—	—	**1/3**	**1/6**	**1/8**	**2/–**	**2/2**	**2/6**

The above Prices are only for Shape A, i.e., Flat.

Shapes B, C and D 10 per cent. extra.

Up to ½ in. diameter packed in ½ dozens; above in ¼ dozens.

Any departure from Standard sizes, 25 per cent. extra.

COLD CHISELS FOR MODEL MAKERS AND ENGINEERS

A Flat

B Cross Cut

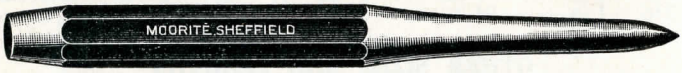
C Half-round

D Dia-mond

The Chisels shown above are made of best forged steel ; they are hardened and tempered at both ends ; are nicely knurled in the middle for a grip ; will be found much better to use and a great improvement on the ordinary plain article.

No. 219	¼ in.	diameter,	4 in.	long,	any	shape	shown	above	..	..	3½d. each
No. 220	5/16 in.	„	4½ in.	„	„	„	..	..	..	4d.	„
No. 221	⅜ in.	„	5⅛ in.	„	„	„	..	..	..	5d.	„
No. 222	½ in.	„	6 in.	„	„	„	..	..	..	6d.	„
No. 223	⅝ in.	,	7 in.	„	„	„	..	..	..	7½d.	„

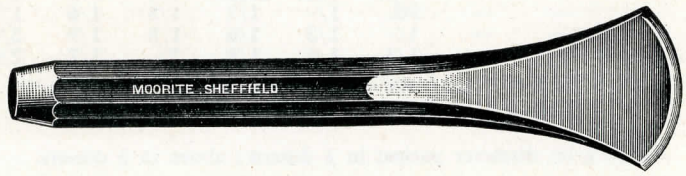
PUNCHES FOR CORRUGATED IRON



No. 245	½ in. dia.	.. ..	7 in. long	.. ..	¼ in. pin	..	6½d. each
No. 246	⅝ in. dia.	.. ..	7 in. long	.. ..	5/16 in. pin	..	10d. „
No. 247	¾ in. dia.	.. ..	7½ in. long	.. ..	7/16 in. pin	..	1/– „

Forged from Sheffield Cast Steel.

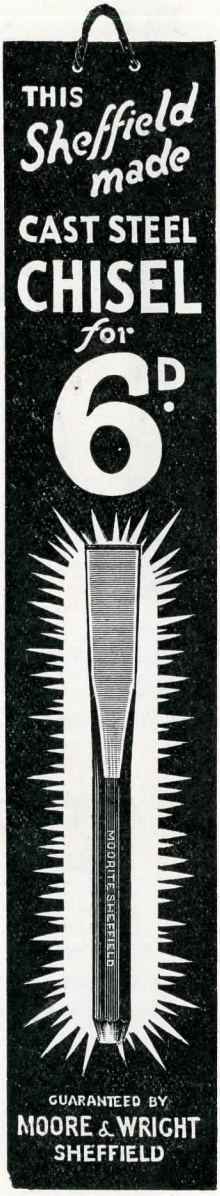
CHISELS FOR CORRUGATED IRON



No. 248 ¾ in. dia. .. .. 8 in. long .. .. 1/3 each

Forged from Sheffield Cast Steel.

THE FAMOUS LINE of CARDED CHISELS



OCTAGON COLD CHISELS

On Showcard.

No. 239	Set of 4, $\frac{1}{4}$ in. diam. . .	1/4 per card
No. 240	„ $\frac{5}{16}$ in. „ . .	1/6 „
No. 241	„ $\frac{3}{8}$ in. „ . .	1/10 „
No. 242	„ $\frac{1}{2}$ in. „ . .	2/3 „
No. 243	„ all flat, one each, $\frac{1}{4}$ in., $\frac{5}{16}$ in., $\frac{3}{8}$ in., $\frac{1}{2}$ in. diam.	1/9 „

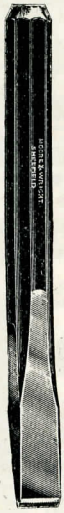
KNURLED COLD CHISELS

On Showcard.

No. 209	Set of 4, $\frac{1}{4}$ in. diam. . .	1/4 per card
No. 210	„ $\frac{5}{16}$ in. „ . .	1/6 „
No. 211	„ $\frac{3}{8}$ in. „ . .	1/11 „
No. 212	„ $\frac{1}{2}$ in. „ . .	2/3 „
No. 213	„ all flat chisels, one each $\frac{1}{4}$ in., $\frac{5}{16}$ in., $\frac{3}{8}$ in., $\frac{1}{2}$ in. diam. . .	1/10 „

See Page 135.

TILE CHISELS



No. **214**
Assorted $\frac{5}{16}$ in. and $\frac{3}{8}$ in. diam.
4d. each
Packed in $\frac{1}{2}$ dozens

SCRIBERS ON CARD

ASSORTED

1 dozen Assorted Scribers, as shown.
No. **78** .. .. **10/-** per Card.

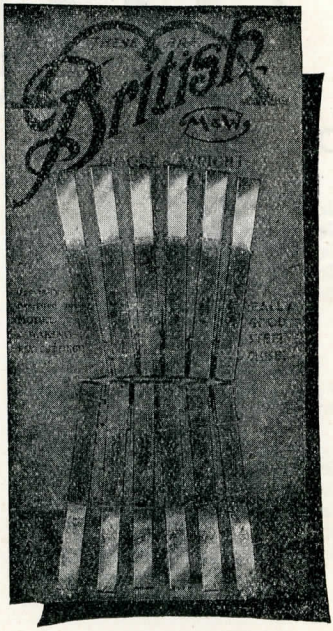
CAST STEEL CHISELS

for

Model Makers,
Keycutters, and any
Small, Fine Work.

No. **215**
1 dozen on Card, as shown.
Size $3\frac{1}{2} \times \frac{3}{8} \times \frac{1}{8}$ in. $\frac{3}{8}$ in. on cut.
Approximate sizes.

No. 215
1 dozen on Card .. 3/- per Card.



NEW PATTERN SOLDERING IRON

No. **768**

All the old troubles with rivets coming loose are abolished with this new shank.

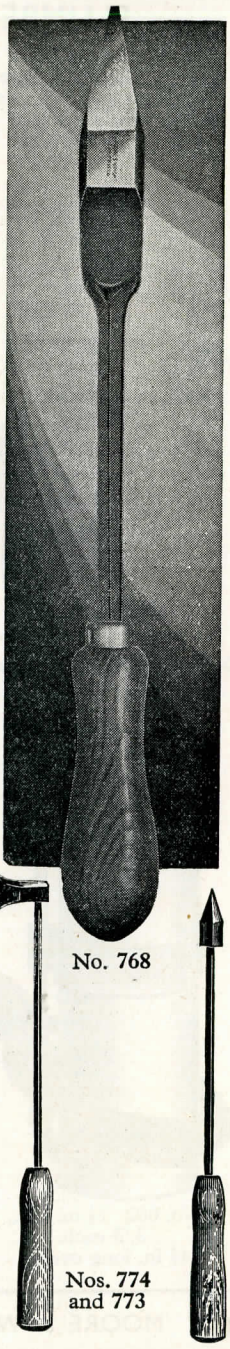
NO RIVETS to come loose.

Copper bit in a more solid mass, thereby holding heat longer.

Tang goes right through head and is bent back and welded together **so head can never come off.**

No increase in price.

Weight of Copper		PRICES:	
4 oz. ..	1/3 each	16 oz. ..	3/- each
6 oz. ..	1/6 „	18 oz. ..	3/3 „
8 oz. ..	1/9 „	20 oz. ..	3/9 „
10 oz. ..	2/- „	22 oz. ..	4/- „
12 oz. ..	2/3 „	24 oz. ..	4/3 „
14 oz. ..	2/9 „		

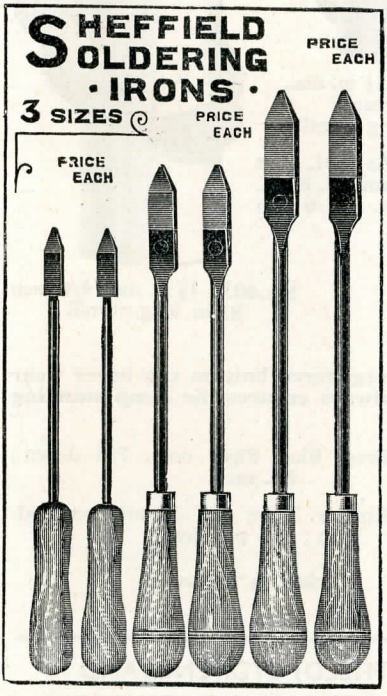


No. 768

Nos. 774 and 773

OLD PATTERN SOLDERING IRON

No. 770	Amateurs	No. 1	2	3
	Straight	6d.,	9d.,	1/- each.
	Hatchet	8d.,	11d.,	1/2 „



No. **772** Card of 6, Assorted, No. 1, 2 & 3. 5/- per Card.

Small Soldering Irons for Wireless Workers.

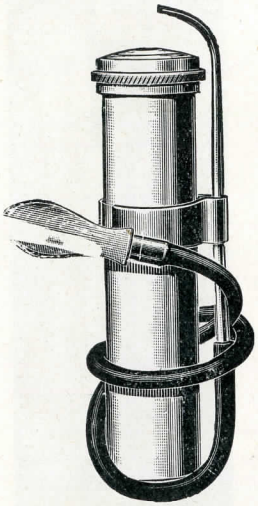
No. **773** Straight shape, 10 in. overall, 5d. each.

No. **774** Hatchet shape, 9½ in. overall, 5d. each.

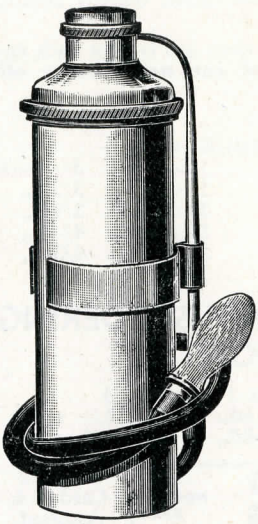
No. **775** Card of 1 doz. Assorted, No.773 &774 5/6 per Card.

PLUMBERS' BRASS BLOW LAMPS

The Bodies of these Lamps are made of specially selected solid drawn tube. The Blow Pipe is fixed on a sliding spring, which grips the body of the lamp, and adjustments are readily effected. We beg to draw attention to the new registered reinforced bottom illustrated on page 141.

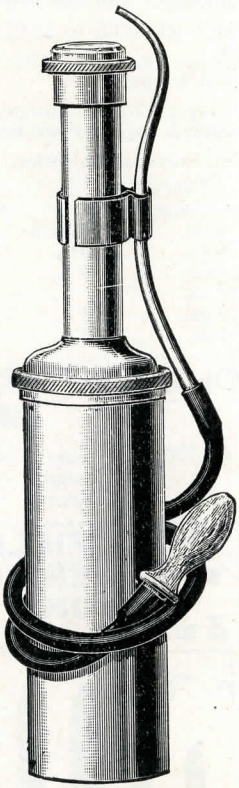


No. **600** 1 in. dia.,**2/3** each
$4\frac{7}{8}$ in. long overall

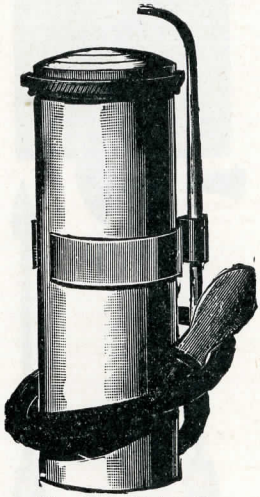


No. **601** $1\frac{1}{2}$ in. dia.,
3/9 each
$5\frac{1}{2}$ in. long overall

No. **605** As 601, but only 1 in. diameter, $6\frac{7}{8}$ in. long overall .. **3/6** each



No. **603** $1\frac{1}{2}$ in. dia., **4/6** each
$8\frac{1}{4}$ in. long overall



No. **602** $1\frac{1}{2}$ in. dia.,
3/3 each
$4\frac{3}{4}$ in. long overall

The new registered bottom can never wear out and always ensures the lamp standing upright.

No. **606** Brass Blow Pipes only, **7/6** dozen ; **8d.** each.

No. **607** Rubber Tube and Mouthpiece, **6d.** each ; **5/6** per dozen.

Packed in $\frac{1}{4}$ dozens

SPECIAL STRONG BLOW LAMP

FOR HEAVY USE

This Lamp is a new line we have introduced to fill the demand for a strong robust article that will stand rough usage. The body of the lamp is made of very strong material and the screw thread is cut inside (where it cannot be damaged) and the bottom is of our registered reinforced design which always ensures the lamp standing upright, and is practically everlasting. The other parts of the lamp are suitably proportioned.

No. **609**

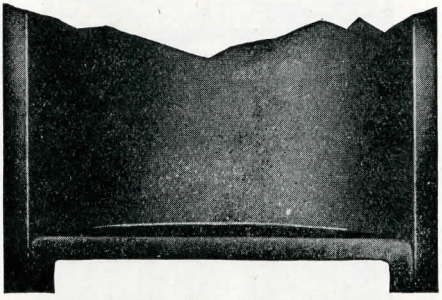
Price .. .. **5/3** each

$1\frac{5}{8}$″ diam., $5\frac{5}{8}$″ overall

This lamp is the same construction as supplied to leading Gas Companies and Corporations.

No. **609**

THIS IS WHY OUR BLOW LAMPS SELL



Reg. No. **670350**

This is the greatest improvement ever made in the construction of Plumbers' Blow Lamps.

These bottoms can never leak, never wear out, and the Lamps will always stand upright. There is no increase in price.

Enlarged Section showing our Registered reinforced bottom

MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

YOU'LL BE SURPRISED HOW STEADY THEY ARE
KNURLED
Turnscrews
HOLD SMALL SCREWS BETTER THAN ANY OTHERS
MOORE & WRIGHT. SHEFFIELD

No. 283A 1 Card of 12 polished handle Turnscrews (four each 1½″, 2½″, 3½″) **7/6** per Card

No. 283B 1 „ 12 „ (i.e., three of each 1½″, 2½″, 3½″, 6″) **8/3** per Card

No. 283 Not Carded .. 1½″, **6d.**; 2½″, **7d.**; 3½″, **8d.**; 6″, **10d.** each

The above is one of the smartest Turnscrews ever made.

●

With every order for Blow Lamps one Handsome Show Card, as illustration, is sent free of charge.

●

All Blow Lamps have Registered Reinforced Bottom.

BRITISH BLOWLAMPS
MANUFACTURED BY MOORE & WRIGHT SHEFFIELD
PRICE 3/9 EACH
PRICE 3/9 EACH
ALWAYS STANDS UPRIGHT.
WILL NOT LEAK
ALL FILLED WITH SPECIAL REINFORCED BOTTOM (REG No 670350)
MADE IN VARIOUS SIZES.

MOORE & WRIGHT
(SHEFFIELD) LTD.
ENGLAND

KNURLED TURNSCREWS

WITH POLISHED RED HANDLES

No. 283 Four Sizes

A very smart and reliable article, the knurled centre makes it possible to hold small screws very steadily.

1½″	2½″	3½″	6″	
6d.	**7d.**	**8d.**	**10d.**	each

Packed in ½ dozens

OCTAGON CAST STEEL WALL DRILLS

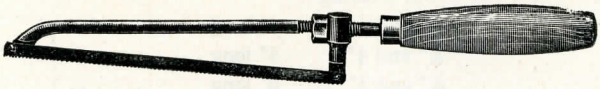
Just the thing for cutting through plaster, brick, etc. Well hardened and tempered.

No. **152**	9″ × ⅜″		**8d.** each
No. **153**	12″ × ½″		**10d.** „

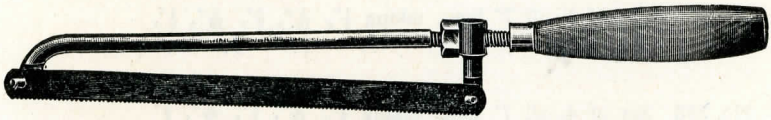
Packed in 1 dozens

No. **154**	Card of 6 each	9/3 Card

SMALL SPACE HACK SAW



No. 790



No. **791**

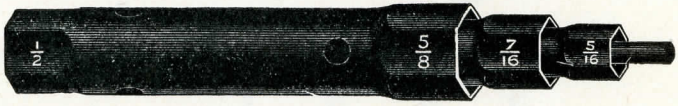
Specially made for use on wireless jobs, in confined spaces and any awkward places.

No. **790**	With one 6 in. blade. Takes blade No. 666	1/7 each
No. **791**	With one 8 in. blade. Takes ordinary 8 in. blade	1/9 „

Packed in ½ dozens

MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

SHEFFIELD MADE BOX SPANNERS



Special Prices for Quantities

DOUBLE ENDED. STRONG AND RELIABLE.

In Sets as below :—

No. **548** Cycle size, set of 3, taking $\frac{1}{8}$″, $\frac{3}{16}$″, $\frac{1}{4}$″, $\frac{5}{16}$″, $\frac{3}{8}$″, $\frac{7}{16}$″, and tommy, 3″ in length .. .. **1/–** per set

No. **547** Cycle size, Special, set of 3, smallest size has square at one end .. .. **10d.** „

No. **549** MOTOR Size, set of 3, taking $\frac{1}{4}$″, $\frac{5}{16}$″, $\frac{3}{8}$″, $\frac{7}{16}$″, $\frac{1}{2}$″, $\frac{5}{8}$″, and tommy, 7″ long .. .. **2/6** „

No. **557** Light Car Set of 3 taking

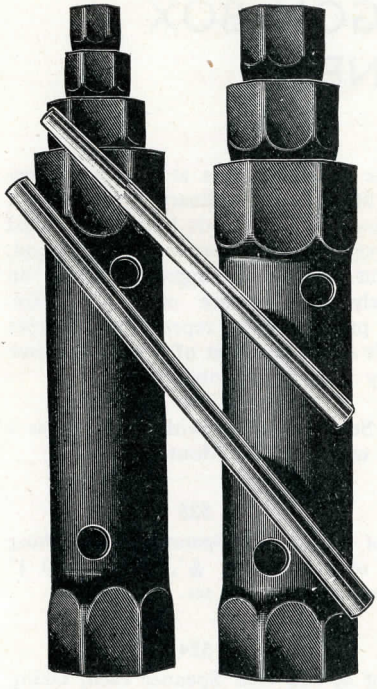
$\frac{3}{16}$″ and $\frac{1}{4}$″	4″ long	.. ..	**2/–** „
$\frac{5}{16}$″ and $\frac{3}{8}$″	5″ long	.. ..	
$\frac{7}{16}$″ and $\frac{1}{2}$″	6″ long	.. ..	

No. **556** Set of 4, all 7″ long, taking $\frac{1}{4}$″, $\frac{5}{16}$″, $\frac{3}{8}$″, $\frac{7}{16}$″, $\frac{1}{2}$″, $\frac{9}{16}$″, $\frac{5}{8}$″, $\frac{3}{4}$″ .. .. **4/2** „

No. **558** Set of 4, all 7″ long, taking $\frac{1}{8}$″, $\frac{3}{16}$″, $\frac{1}{4}$″, $\frac{5}{16}$″, $\frac{3}{8}$″ $\frac{7}{16}$″, $\frac{1}{2}$″, $\frac{9}{16}$″ .. .. **3/4** „

No. **559** Special Motor Set of 3, taking

$\frac{1}{4}$″	$\frac{5}{16}$″	$\frac{3}{8}$″	$\frac{7}{16}$″	$\frac{1}{2}$″ $\frac{5}{8}$″
$4\frac{1}{2}$″ long	5″ long		$5\frac{1}{2}$″ long	**2/2** „



SHEFFIELD MADE BOX SPANNERS

Sold Singly as below :—

No. 548
3″ long

				Each
A	for	$\frac{1}{8}$″ × $\frac{3}{16}$″	nuts	3½d.
B	,,	$\frac{1}{4}$″ × $\frac{5}{16}$″	,,	5½d.
C	,,	$\frac{3}{8}$″ × $\frac{7}{16}$″	,,	7½d.

No. 540
7″ long

A	for	$\frac{1}{8}$″ × $\frac{3}{16}$″	nuts	6d.
B	,,	$\frac{3}{16}$″ × $\frac{1}{4}$″	,,	6½d.
C	,,	$\frac{1}{4}$″ × $\frac{5}{16}$″	,,	6½d.
D	,,	$\frac{5}{16}$″ × $\frac{3}{8}$″	,,	10d.
E	,,	$\frac{3}{8}$″ × $\frac{7}{16}$″	,,	11d.
F	,,	$\frac{3}{8}$″ × $\frac{1}{2}$″	,,	1/1
G	,,	$\frac{7}{16}$″ × $\frac{1}{2}$″	,,	1/2
H	,,	$\frac{1}{2}$″ × $\frac{9}{16}$″	,,	1/3
J	,,	$\frac{9}{16}$″ × $\frac{11}{16}$″	,,	1/3
K	,,	$\frac{1}{2}$″ × $\frac{5}{8}$″	,,	1/4
L	,,	$\frac{5}{8}$″ × $\frac{9}{16}$″	,,	1/4
M	,,	$\frac{5}{8}$″ × $\frac{3}{4}$″	,,	1/6
N	,,	$\frac{3}{4}$″ × $\frac{7}{8}$″	,,	1/8
O	,,	$\frac{7}{8}$″ × 1″	,,	1/10
P	,,	1″ × 1$\frac{1}{8}$″	,,	2/3
Q	,,	1″ × 1$\frac{1}{4}$″	,,	2/7
R	,,	1$\frac{1}{8}$″ × 1$\frac{1}{4}$″	,,	2/9
S	,,	1$\frac{1}{4}$″ × 1$\frac{1}{2}$″	,,	3/–

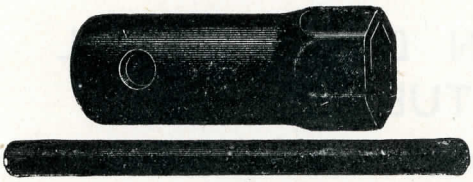
SPECIAL ENGINEERS' SET OF 7 SPANNERS

All 7 in. long. 2 Tommy Bars.

1 each taking $\frac{3}{16}$″ × $\frac{1}{4}$″, $\frac{5}{16}$″ × $\frac{3}{8}$″, $\frac{7}{16}$″ × $\frac{1}{2}$″, $\frac{9}{16}$″ × $\frac{5}{8}$″, $\frac{11}{16}$″ × $\frac{3}{4}$″, $\frac{13}{16}$″ × $\frac{7}{8}$″, $\frac{15}{16}$″ × 1″

No. **560** .. **9/3** per Set. Special Prices for Quantities.

SPARK PLUG SPANNERS



No. 546

No. **546A**
For $\frac{9}{16}$″ plugs..**8½d.** each

No. **546B**
For $\frac{1}{2}$″ plugs ..**8½d.** each

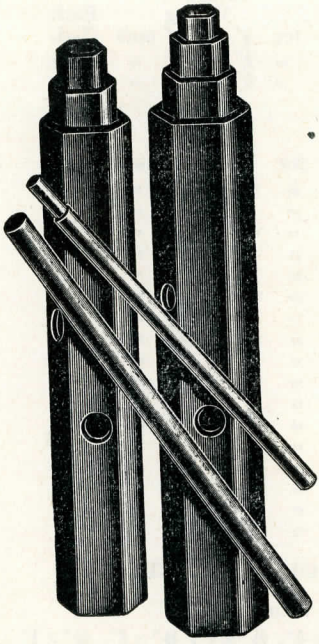
No. **546D**
For 14 m/m plugs **8½d.** each

No. **546C** Double ended Plug Spanner taking $\frac{1}{2}$″ and $\frac{9}{16}$″ plugs ..**10d.** each

No. **546E** Double ended .. 1 $\frac{5}{32}$″ × $\frac{31}{32}$″ across flats .. **1/1** each

No. **546F** ,, ,, .. 1 $\frac{1}{32}$″ × $\frac{29}{32}$″ ,, ,, .. **1/1** ,,

ALL-HEXAGON BOX SPANNERS



These Spanners have at least ten times the life of the ordinary type of Box Spanner. As the ends become distorted by wear, the worn portion can be ground, or cut off, thus bringing into use an entirely new surface of correct size. This process can be repeated many times and **it saves the cost of a new spanner every time it is done.**

The Set detailed herewith is offered as a most useful Set for Motorists, etc.

No. 525

Set of 7, i.e., One Spanner each, taking nuts of $\frac{1}{8}$″, $\frac{3}{16}$″, $\frac{1}{4}$″, $\frac{5}{16}$″, $\frac{3}{8}$″, $\frac{7}{16}$″ and $\frac{1}{2}$″ Whitworth, 5/– per set.

No. 524

Set of 4, i.e., One Spanner each, taking nuts of $\frac{1}{8}$″, $\frac{3}{16}$″, $\frac{1}{4}$″ and $\frac{5}{16}$″ Whitworth, 2/3 per set.

SINGLE SPANNERS

No. 523—

$\frac{1}{8}$	$\frac{3}{16}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{3}{4}$ inch
4½d.	6½d.	8d.	9d.	10d.	1/1½	1/4	1/6	1/6	1/11 each

HEXAGON DRAWN STEEL TUBING

IN 2 FOOT LENGTHS

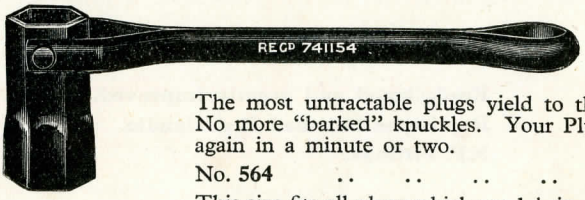
No. 522—

The sizes given are the sizes of Whitworth Bolt Head the tube will take.

$\frac{1}{8}$	$\frac{3}{16}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{3}{4}$ inch.
1/1	1/2	1/4	1/6	1/8	2/2	2/6	2/9	2/11	3/10 per 2 foot length.

SWIVEL PLUG SPANNERS

Superlative Efficiency



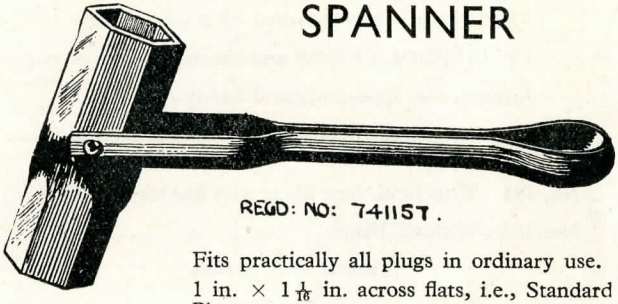
The most untractable plugs yield to this tool with ease. No more "barked" knuckles. Your Plugs are out and in again in a minute or two.

No. **564** .. .. Price **1/5** each

This size fits all plugs which are $1\frac{1}{16}$ in. across the hexagon flats, viz.: the Standard $\frac{9}{16}$ in. plug, i.e., Lodge, K.L.G., etc.

No. **564D** To fit 14 m/m Plugs .. .. **1/5** each
No. **564E** „ „ $\frac{5}{8}$" „ .. .. **1/5** each

DOUBLE ENDED PLUG SPANNER



Fits practically all plugs in ordinary use.

1 in. × $1\frac{1}{16}$ in. across flats, i.e., Standard $\frac{1}{2}$ in. × $\frac{9}{16}$ in. Plugs.

No. **565** Price .. .. **2/2** each

No. **566** Special long reach, Single Ended Spanner for Essex A.C., etc. .. **2/3** each

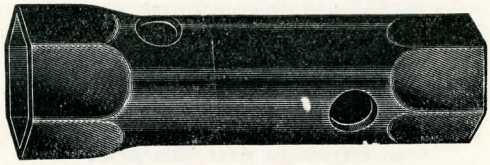
DOUBLE ENDED PLUG SPANNER

For 14 m/m and 18 m/m Plugs

One end $\frac{27}{32}$" across flats and other end $1\frac{1}{32}$" across flats.

No. **539** .. .. Price 1/2 each

No. **539**



Special Price for 6 doz. lots.

MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

REGISTERED
PADSAW HANDLE

No. 383

Re-designed and greatly improved.
Handsome Polished Red Handle.
N.P. Fittings.

We confidently put forward this Padsaw Handle as the most perfect yet made.

Its outstanding advantages are—

PERFECT LOCKING OF BLADE in any position. The lock-tooth does not project, but is concealed and therefore cannot be injured or broken.

The locking is accomplished by a single screw.

IT IS FOOL-PROOF and cannot get out of order.

Attractive in appearance and handy to use.

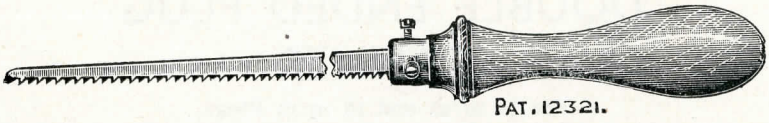
The Saw Blade CANNOT SLIP BACK and injure the hand.

No. **383** With 12 in. Saw Blade with fine teeth 3/– each

No. **383A** Without Blade .. .. .. 2/9 „

Packed in ½ dozens

POPULAR LOCKTOOTH SAW PAD



This Saw Pad has been introduced to meet the demand for a thoroughly reliable Saw Pad at a low price. The saw blade is perfectly rigid and positive in use and the patented device positively prevents it slipping back. It is light and handy and cannot be improved on at the price.

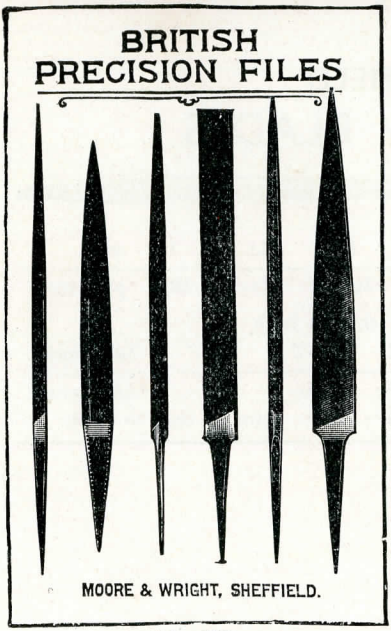
No. **781** Handle only .. .. 1/– each

No. **782** Complete with 11″ blade, as illustrated .. .. 1/3 „

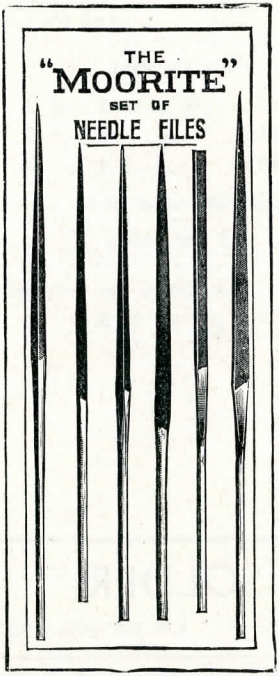
THERE IS NO OTHER SAW PAD with LOCKTOOTH at anywhere near this price

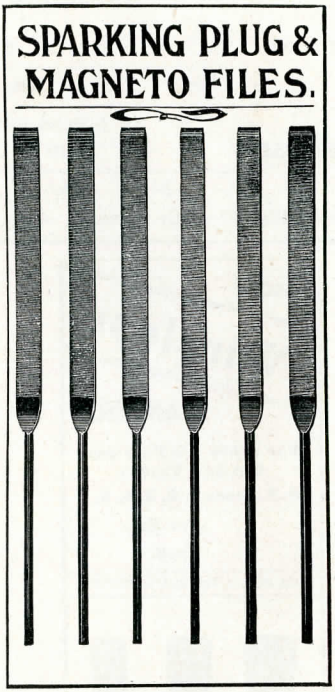
MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

SMALL BRITISH FILES



No. **580**
6 assorted Files of various shapes and cuts up to 3½″ 2/6 per card





No. **583**
Spark Plug Files, 2/6 per card.
Gross lots special price.
These files are now made with flat tangs.

No. **584**

NEEDLE FILES

Card of 6 Needle Files, round handle .. .. 2/– per card

LOOSE NEEDLE FILES, No. **584**
14c/m 5½″ .. 3/9 per doz.
All shapes same price

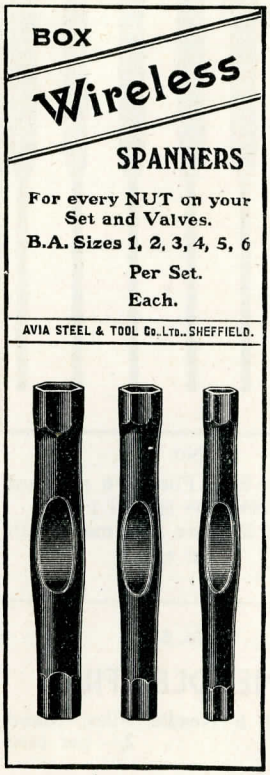
SHEFFIELD
PAD SAW BLADES

No. 647	7	8	9	10	11	12	inch.
	26/–	26/–	26/–	26/–	27/–	28/–	per gross.

Special ground thin to back

No. 653	8	9	10	11	12	13	14	inch.
	33/–	34/–	35/–	36/–	38/–	40/–	42/–	gross.

No.647A 17 teeth to inch 42/– 44/– 46/– ground thin to back.



No. 544X 1 Card of three, covering all sizes from 1 to 6, B.A.
10½d. per Card

Not Carded

No. 544/A For B.A. 1 and 2.
No. 544/B „ 3 „ 5.
No. 544/C „ 4 „ 6.

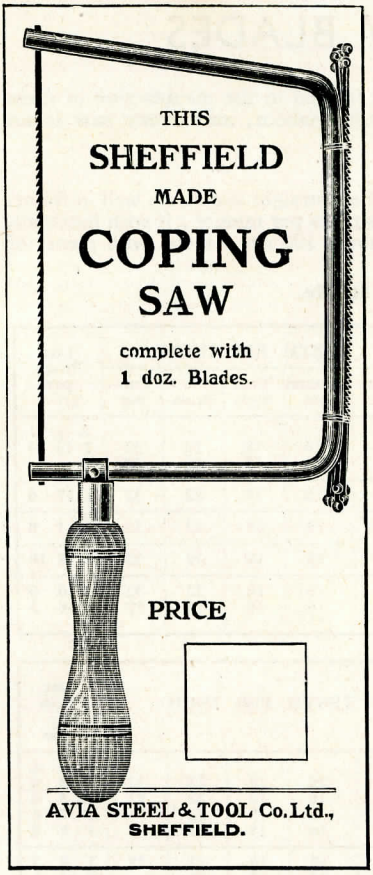
All sizes same price

3/3 per dozen

No. 551 As above, but stronger, 1/– per set of 3.

SELF-FLUXING SOLDER

No. 776 Lengths of **Self-Fluxing Solder** .. 1/6 per doz. lengths



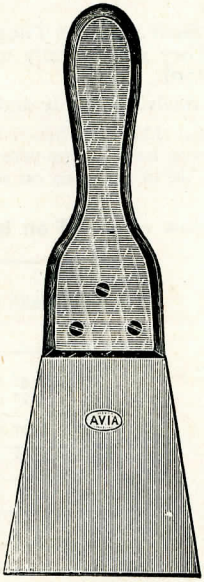
No. **630** .. **1/6** each
With 1 doz. saw blades.

No. **633** with one blade for metal and one for wood
Price .. **1/6** each

No. **631** loose Blades for wood.
Price .. **6/-** per gross

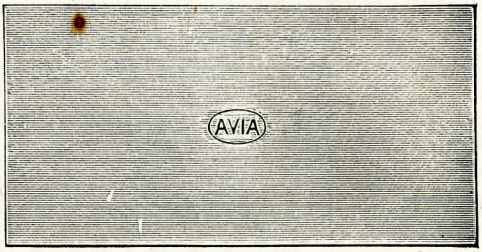
DISPLAY CARDS sent out with EVERY ORDER.

WALL SCRAPERS



No. **696**
3½ inch blade .. **8d.** each
No. **689** SPECIAL LINE **6½d.** each

CABINET SCRAPERS



No. **697**

3″ × 1½″	4″ × 2″	5″ × 2½″	6″ × 3″
3/-	3/8	4/5	5/6 doz.

HACK SAW BLADES

Only the finest grade of Tungsten Steel is used in the manufacture of these blades. They are carefully made by skilled labour, **and every saw is an efficient tool.**

They cut freely, smoothly and quickly.

Do not bend sidewise when using, keep them straight and strain well in frame. If used dry in hand frame take about 50 strokes per minute ; if with lubricant, about 60. If in machine on soft steel, about 100 per minute, with plenty of lubricant.

See that saw eases off on backward stroke.

HAND BLADES No. 690.

Length	Width	Thickness	TEETH PER INCH					List Prices per gross
			Mild Steel	General use	Tool Steel	Brass	Tubing	
in.		Gauge						£ s. d.
8	7/16″	23	14	16	18	22	32	1 13 4
8	1/2″	23	14	16	18	22	32	
9	1/2″	23	14	16	18	22	32	1 17 6
10	1/2″	23	14	16	18	22	32	2 1 8
11	1/2″	23	14	16	18	22	32	2 5 10
12	1/2″	23	14	16	18	22	32	2 10 0
12	9/16″	23	14	16	18	22	32	2 16 3

HAND OR LIGHT GRAVITY FEED MACHINE SIZES. No. 691.

Length	Width	Thickness	TEETH PER INCH					List Prices per gross
in.		Gauge						£ s. d.
12	9/16″	22	14	16	18	22	32	2 18 6
12	5/8″	22	14	16	18	22	32	3 5 0
12	5/8″	21	14	16	18	22	—	3 7 6
12	3/4″	21	14	16	18	22	—	4 1 0
14	9/16″	22	14	16	18	22	32	3 8 3
14	3/4″	21	14	16	18	22	—	4 14 6
16	3/4″	21	14	16	18	22	—	5 8 0

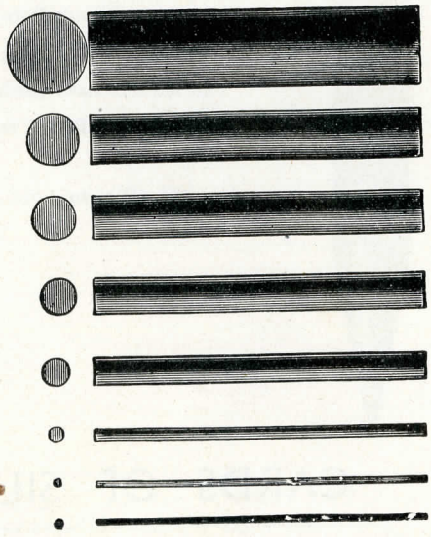
FOR POWER HEAVY FEED. No. 692.

Length	Width	Thickness	STANDARD TEETH PER INCH					List Prices per gross
in.	in.	Gauge						£ s. d.
10	¾	18	—	—	10	12	14	4 5 0
12	¾	18	—	—	10	12	14	5 2 0
12	1	18	—	8	10	12	14	6 16 0
12	1	17	—	8	10	—	—	7 12 0
13	1	18	—	8	10	12	14	7 7 4
14	¾	18	—	—	10	12	14	5 19 0
14	1	18	—	8	10	12	14	7 18 8
14	1	16	6	8	10	—	—	9 16 0

"MOORITE" SILVER STEEL

No. 196

Inch.	decimal.	Price per lb.	Approx. number of feet in 1 lb.
1/32	·0312	9/6	385
3/64	·0468	6/–	167
1/16	·0625	4/10	95
5/64	·0781	3/6	60
3/32	·0938	3/6	43
7/64	·1094	3/–	31
1/8	·125	3/–	24
9/64	·1406	2/9	18
5/32	·1562	2/9	15
11/64	·1718	2/9	13
3/16	·1875	2/6	10
13/64	·2031	2/6	9
7/32	·2187	2/6	7
15/64	·2344	2/6	6½
1/4	·250	2/6	6
9/32	·2812	2/6	4½
5/16	·3125	2/6	3¾
11/32	·3438	2/6	3
3/8	·375	2/6	2
7/16	·4375	2/6	2
1/2	·500	2/6	1½
9/16	·5625	2/6	1 full
5/8	·625	2/6	1 bare



ASK FOR DISCOUNT OFF THIS LINE.

Square Silver Steel can be supplied.

SPECIAL NOTE

When any size of Silver Steel is ordered, **except fractional sizes,** it saves time and possible errors to give the sizes in thousandths of an inch. Avoid ordering in gauge sizes, as owing to the large number of Gauges in use, errors may ensue.

The Cabinet shown on page 158 will increase your sales of Silver Steel.

No. 293

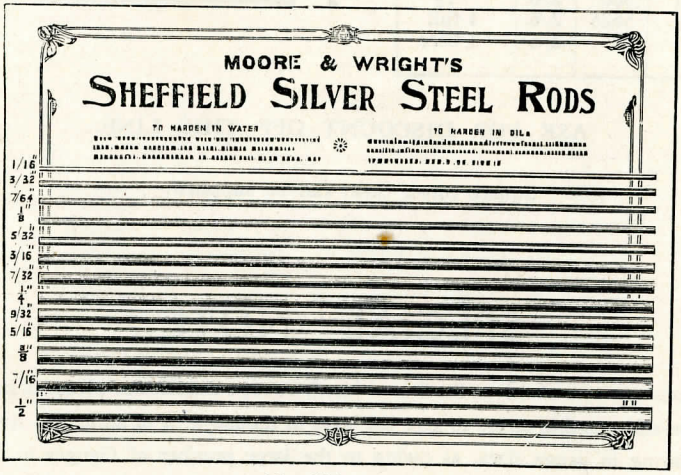
STEEL PLUMB-BOBS

These Plumb-Bobs are turned from solid steel, are accurate and will hang perfectly true. They are nicely mottled and have hardened points. The centre portion of the Plumb-Bob is recessed to accommodate the line.

No. **293** Weight 4 ozs., length 4½″, diameter ⅝″

2/6 each.

CARDS OF SILVER STEEL



No. **192** round

No. **195**	Card of $\frac{1}{16}$ to $\frac{5}{16}$	2/– per card	
„ **192**	Card of Silver Steel, as illustrated	4/6	„
„ **193**	Parcel of 1-lb. assorted	2/– per parce	
„ **194**	Parcel of 2-lb. assorted	3/9	„

SILVER STEEL

Silver Steel is of the Crucible Carbon Tool Steel variety and is not an Alloy Steel in the general sense. It is particularly free from all impurities such as Sulphur, Phosphorus, and slag inclusions.

It machines easily and smoothly and is the ideal steel for general purposes. It can be used in its natural state as supplied, or it can be hardened and tempered to suit requirements. By different treatment a very wide variation in physical characteristics can be obtained, and for this reason it is particularly suitable for general purposes.

It can be used for the production of small tools, taps, punches, drills, instrument and metre parts, and small machine parts.

We give you below heat treatment instructions and Rockwell Hardnesses for the various purposes to which Silver Steel may be successfully applied :—

QUENCHING TEMPERATURES

Hardening : In Water. 750/770° C. In Oil. 770/790° C.

Tempering :

Tempered at.	Rockwell.	Purpose.
200° C.	64	Engraving Tools.
210° C.	63	Scrapers and small Lathe Tools.
220° C.	62	Master Gauges.
230° C.	61	Twist Drills (small), Taps, Chasers.
240° C.	60	Twist Drills (med. size), Reamers.
250° C.	59	Twist Drills (large), Jewellers' Rolls.
260° C.	58	Large Reamers, Taps, etc.
270° C.	57	Ivory Cutting Tools.
280 C.	56	Hand Chisels for Wood.
290° C.	55	Hand Chisels for Steel.
300° C.	54	Small Springs, etc.

Heating for Hardening.—Silver Steel should not be heated beyond the lowest temperature at which it will satisfactorily harden, as given above. This will ensure a finer grain structure being obtained and will result in the tools giving maximum service. Do not force the hardening temperature up quickly, but let the tool get hot gradually. It is preferable to heat the tool in a muffle, if possible, as more uniform temperatures are obtained.

Quenching.—Intricate Cutters and articles such as Milling Cutters, which are liable to crack, can, with advantage, be quenched in warm water approximately 80/100° C.

Tempering.—Oil Baths are preferable for the tempering operation, as very uniform and exact results can be obtained.

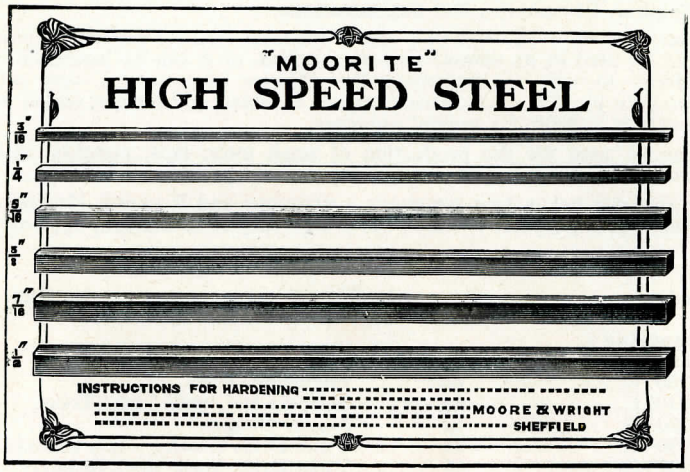
Re-Hardening.—When hardened tools require re-grinding be sure to see that the tool is annealed correctly before being re-hardened. This will minimise the risk of breakage caused through internal hardening strains.

EXPANSION OF SILVER STEEL

	Co-efficient of linear Expansion per 1° C.
Annealed Condition.	
110° C.	·0000052
210° C.	·0000067
Hardened Condition.	
110° C.	·0000097
210° C.	·0000098

"MOORITE" HIGH SPEED STEEL

In 1 foot lengths, annealed.



Card No.	**190**	Square.	6 bars as shown	**10/–** per card
„	**191**	Round.	6 bars same diameters ..	**9/6** „

High Speed Steel can also be supplied in bars of 12″ long, as follows :—

	$\frac{3}{16}$″	$\frac{1}{4}$″	$\frac{5}{16}$″	$\frac{3}{8}$″	$\frac{7}{16}$″	$\frac{1}{2}$″	
Square	**8d.**	**10d.**	**1/4**	**1/10**	**2/6**	**2/8**	square per bar.
Round	**8d.**	**10d.**	**1/2**	**1/9**	**2/3**	**2/6**	„

HARDENING INSTRUCTIONS FOR "MOORITE" HIGH SPEED STEEL

"Moorite" High Speed Steel is SUPREME for all turning and form tools, and is infinitely more durable than the best cast steel. Will stand highest possible speeds and feeds.

TO HARDEN.—Heat carefully to bright red and then quickly to nearly white heat, then immerse quickly in cold air blast, whale oil, tallow or paraffin. If great care is used, the cutting edge can be immersed in nearly boiling water and then the body of the tool cooled off immediately afterwards. Use plenty of water when grinding.

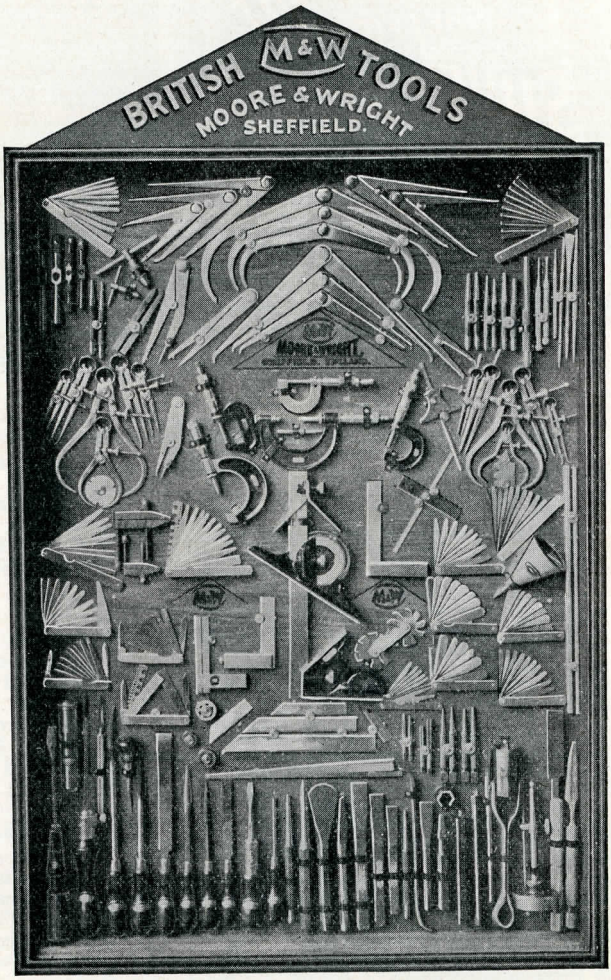
SHOW CASES

This is an illustration of a Show Case containing a selection of our articles. It is very effective as a business bringer.

It is supplied in polished Oak.

No. **1000** .. .. .. Size 30″ × 20″

No. **1006** .. .. .. Size 42″ × 30″



Note — The cases now supplied vary from the illustration owing to the inclusion of many new lines.

We supply the Case complete, to the Trade only, **at the cost of the Tools only.**

No. **1005**

We supply this Polished Oak Cabinet at actual cost to buyers of "Moorite" Silver Steel. It is convenient to sell from, and **ENORMOUSLY INCREASES SALES.**

This Case is sold either empty or filled with an assortment of Silver Steel ranging from $\frac{1}{32}''$ to $\frac{1}{2}''$ round, and an assortment of High Speed Steel ranging from $\frac{1}{4}''$ to $\frac{1}{2}''$ square. Polished Oak. Prices and further particulars on application.

No. **1002**

This is an Artistic Stand, in dull polished Oak, that shows the tools up to perfection. The Stand itself is calculated at less than cost, and will earn more than we charge for it every week.

Price :
(with Tools as shown)
14/6 each.

● MOORE & WRIGHT (SHEFFIELD) LTD. ENGLAND

Decimal Equivalents of Stubs' Steel Wire Gauge

Letter.	Size of Letter in Decimals.	No. of Wire Gauge.	Size of Number in Decimals.	No. of Wire Gauge.	Size of Number in Decimals.	No. of Wire Gauge.	Size of Number in Decimals.
Z	·413	1	·227	28	·139	55	·050
Y	·404	2	·219	29	·134	56	·045
X	·397	3	·212	30	·127	57	·042
W	·386	4	·207	31	·120	58	·041
V	·377	5	·204	32	·115	59	·040
U	·368	6	·201	33	·112	60	·039
T	·358	7	·199	34	·110	61	·038
S	·348	8	·197	35	·108	62	·037
R	·339	9	·194	36	·106	63	·036
Q	·332	10	·191	37	·103	64	·035
P	·323	11	·188	38	·101	65	·033
O	·316	12	·185	39	·099	66	·032
N	·302	13	·182	40	·097	67	·031
M	·295	14	·180	41	·095	68	·030
L	·290	15	·178	42	·092	69	·029
K	·281	16	·175	43	·088	70	·027
J	·277	17	·172	44	·085	71	·026
I	·272	18	·168	45	·081	72	·024
H	·266	19	·164	46	·079	73	·023
G	·261	20	·161	47	·077	74	·022
F	·257	21	·157	48	·075	75	·020
E	·250	22	·155	49	·072	76	·018
D	·246	23	·153	50	·069	77	·016
C	·242	24	·151	51	·066	78	·015
B	·238	25	·148	52	·063	79	·014
A	·234	26	·146	53	·058	80	·013
		27	·143	54	·055		

STUBS' GAUGES.—In using the gauges known as Stubs' Gauges, there should be constantly borne in mind the difference between the Stubs' Iron Wire Gauge and the Stubs' Steel Wire Gauge. The Stubs' Iron Wire Gauge is the one commonly known as the Birmingham Gauge, and designates the Stubs' soft wire sizes. The Stubs' Steel Wire Gauge is the one that is used in measuring Drawn Steel Wire.

The International Standard Metric System

NOTE.—The French Thread is being gradually displaced by the International Standard Metric Thread.

Diam. in m/m.	Pitch in m/m.		Diam. in m/m.	Pitch in m/m.		Diam. in m/m.	Pitch in m/m.	
	International Standard	French Standard		International Standard	French Standard		International Standard	French Standard
2	·4	—	27	3·0	—	72	6·0	—
3	·5	·5	28	—	3·0	76	6·0	—
4	·7	·75	30	3·5	3·5	80	6·0	—
5	·8	·75	32	—	3·5	84	6·0	—
6	1·0	1·0	33	3·5	—	89	6·0	—
7	1·0	1·0	34	—	3·5	94	6·0	—
8	1·25	1·0	36	4·0	4·0	99	6·0	—
9	1·25	1·0	38	—	4·0	104	6·0	—
10	1·5	1·5	39	4·0	—	109	6·0	—
11	1·5	—	40	—	4·0	114	6·0	—
12	1·75	1·5	42	4·5	4·5	119	6·0	—
14	2·0	2·0	45	4·5	—	124	6·0	—
16	2·0	2·0	48	5·0	—	129	6·0	—
18	2·5	2·5	52	5·0	—	134	6·0	—
20	2·5	2·5	56	5·5	—	139	6·0	—
22	2·5	2·5	60	5·5	—	144	6·0	—
24	3·0	3·0	64	6·0	—			
26	—	3·0	68	6·0	—			

Decimal Equivalents of Millimeters and Fractions of m/m.

m/m Inches	m/m Inches	m/m Inches	m/m Inches	m/m Inches
$\frac{1}{100}$ = ·00039	$\frac{26}{100}$ = ·01024	$\frac{51}{100}$ = ·02008	$\frac{76}{100}$ = ·02992	2 = ·07874
$\frac{2}{100}$ = ·00079	$\frac{27}{100}$ = ·01063	$\frac{52}{100}$ = ·02047	$\frac{77}{100}$ = ·03032	3 = ·11811
$\frac{3}{100}$ = ·00118	$\frac{28}{100}$ = ·01102	$\frac{53}{100}$ = ·02087	$\frac{78}{100}$ = ·03071	4 = ·15748
$\frac{4}{100}$ = ·00157	$\frac{29}{100}$ = ·01142	$\frac{54}{100}$ = ·02126	$\frac{79}{100}$ = ·03110	5 = ·19685
$\frac{5}{100}$ = ·00197	$\frac{30}{100}$ = ·01181	$\frac{55}{100}$ = ·02165	$\frac{80}{100}$ = ·03150	6 = ·23622
$\frac{6}{100}$ = ·00236	$\frac{31}{100}$ = ·01220	$\frac{56}{100}$ = ·02205	$\frac{81}{100}$ = ·03189	7 = ·27559
$\frac{7}{100}$ = ·00276	$\frac{32}{100}$ = ·01260	$\frac{57}{100}$ = ·02244	$\frac{82}{100}$ = ·03228	8 = ·31496
$\frac{8}{100}$ = ·00315	$\frac{33}{100}$ = ·01299	$\frac{58}{100}$ = ·02283	$\frac{83}{100}$ = ·03268	9 = ·35433
$\frac{9}{100}$ = ·00354	$\frac{34}{100}$ = ·01339	$\frac{59}{100}$ = ·02323	$\frac{84}{100}$ = ·03307	10 = ·39370
$\frac{10}{100}$ = ·00394	$\frac{35}{100}$ = ·01378	$\frac{60}{100}$ = ·02362	$\frac{85}{100}$ = ·03346	11 = ·43307
$\frac{11}{100}$ = ·00433	$\frac{36}{100}$ = ·01417	$\frac{61}{100}$ = ·02402	$\frac{86}{100}$ = ·03386	12 = ·47244
$\frac{12}{100}$ = ·00472	$\frac{37}{100}$ = ·01457	$\frac{62}{100}$ = ·02441	$\frac{87}{100}$ = ·03425	13 = ·51181
$\frac{13}{100}$ = ·00512	$\frac{38}{100}$ = ·01496	$\frac{63}{100}$ = ·02480	$\frac{88}{100}$ = ·03465	14 = ·55118
$\frac{14}{100}$ = ·00551	$\frac{39}{100}$ = ·01535	$\frac{64}{100}$ = ·02520	$\frac{89}{100}$ = ·03504	15 = ·59055
$\frac{15}{100}$ = ·00591	$\frac{40}{100}$ = ·01575	$\frac{65}{100}$ = ·02559	$\frac{90}{100}$ = ·03543	16 = ·62992
$\frac{16}{100}$ = ·00630	$\frac{41}{100}$ = ·01614	$\frac{66}{100}$ = ·02598	$\frac{91}{100}$ = ·03583	17 = ·66929
$\frac{17}{100}$ = ·00669	$\frac{42}{100}$ = ·01654	$\frac{67}{100}$ = ·02638	$\frac{92}{100}$ = ·03622	18 = ·70866
$\frac{18}{100}$ = ·00709	$\frac{43}{100}$ = ·01693	$\frac{68}{100}$ = ·02677	$\frac{93}{100}$ = ·03661	19 = ·74803
$\frac{19}{100}$ = ·00748	$\frac{44}{100}$ = ·01732	$\frac{69}{100}$ = ·02717	$\frac{94}{100}$ = ·03701	20 = ·78740
$\frac{20}{100}$ = ·00787	$\frac{45}{100}$ = ·01772	$\frac{70}{100}$ = ·02756	$\frac{95}{100}$ = ·03740	21 = ·82677
$\frac{21}{100}$ = ·00827	$\frac{46}{100}$ = ·01811	$\frac{71}{100}$ = ·02795	$\frac{96}{100}$ = ·03780	22 = ·86614
$\frac{22}{100}$ = ·00866	$\frac{47}{100}$ = ·01850	$\frac{72}{100}$ = ·02835	$\frac{97}{100}$ = ·03819	23 = ·90551
$\frac{23}{100}$ = ·00906	$\frac{48}{100}$ = ·01890	$\frac{73}{100}$ = ·02874	$\frac{98}{100}$ = ·03858	24 = ·94488
$\frac{24}{100}$ = ·00945	$\frac{49}{100}$ = ·01929	$\frac{74}{100}$ = ·02913	$\frac{99}{100}$ = ·03898	25 = ·98425
$\frac{25}{100}$ = ·00984	$\frac{50}{100}$ = ·01969	$\frac{75}{100}$ = ·02953	1 = ·03937	26 = 1·02362

TO TEST STEEL AND IRON.

Nitric Acid will produce a black spot on steel; the darker the spot the harder the steel. Iron, on the contrary, remains bright if touched with nitric acid. Good steel in its soft state has a curved fracture and a uniform grey lustre; in its hard state a dull, silvery uniform white. Cracks, threads or sparkling particles denote bad quality.

A white heat will ruin good steel, and it cannot be forged under the hammer at a bright red heat, but it is most ductile at a moderate heat. When hardened in water the strength of steel is reduced, but is increased in strength and toughness by being hardened in oil.

Case-hardening weakens bolts.

Imperial Standard Wire Gauge

No. of Wire Gauge.	Inches	No. of Wire Gauge.	Inches	No. of Wire Gauge.	Inches	No. of Wire Gauge.	Inches
000000	·464	7	·176	19	·040	30	·0124
00000	·432	8	·160	20	·036	31	·0116
0000	·400	9	·144	21	·032	32	·0108
000	·372	10	·128	22	·028	33	·0100
00	·348	11	·116	23	·024	34	·0092
0	·324	12	·104	24	·022	35	·0084
1	·300	13	·092	25	·020	36	·0076
2	·276	14	·080	26	·018	37	·0068
3	·252	15	·072	27	·0164	38	·0060
4	·232	16	·064	28	·0149	39	·0052
5	·212	17	·056	29	·0136	40	·0048
6	·192	18	·048				

INDEX OF NUMBERS

Tool No.	Page	Tool No.	Page	Tool No.	Page	Tool No.	Page	Tool No.	Page
2	63	80	120	152	143	235	135	336	85
4	63	81	115	153	143	236	135	338	85
5	63	82	116	154	143	239	137	339	85
12	59	83	115	156	127, 132	240	137	341	84
14	63	85	115	157	127, 132	241	137	342	84
14A	64	86	115	161	122	242	137	343	86
14RF	63	87	122	162	73	243	137	344	85
19	71	88	122	163	73	245	136	351	118
21	59, 65	90	123	164	62	246	136	352	117
22	59, 65	91	131, 132	165	62	247	136	365	87
23	59, 65	92	131, 132	166	62	248	136	366	87
24	59, 65	93	131, 132	167	62	250	114	370	77
25	59	94	129, 132	170	59	253	114	370K	77
27	59	95	128	171	60	256	130, 132	371	77
28	59	96	128, 132	172	60	257	130, 132	372	77
30	72	97	128, 132	173	60	258	129, 132	372K	77
31	61	98	128	174	83	261	121	373	77
32	61	99	128, 132	175	85	262	121	374	80
32B	63	100	128, 132	178	39	263	121	375	78
33	61	101	128, 132	179	39	264	121	376	78
34	72	102	105	180	119	265	123	377	76
35	72	102A	107	185	119	266	123	378	78
36	61	103	105	188	122	267	123	379	78
37	71	103A	107	190	156	272	121	380	79
38	71	104	105	191	156	283	142, 143	382K	77
39	73	105	105	192	154	288	113	383	148
40	92	107	107	193	154	290	120	384	81
41	92	108	106	194	154	293	154	385	88
42A	92	109	106	195	154	295	108	386	88
43	92	111	105	196	153	296	108	388	88
50	89	111A	107	200	93	300	78	391	67
51	89	115	104	203	93	301	78	392	67
52	89	121	60	206	51	308	52, 53	393	67
53	89	122	60, 65	209	137	309	52, 53	394	67
54	89	124	60, 65	210	137	310	53, 55	397	79
55	89	125	60	211	137	312	53, 54	400	50
58	86	128	60	212	137	313	53, 54	401	45, 46, 48, 47
60	91	129	60	213	137	315	55		
65	91	130	61	214	138	315S	55	402	49
66	91	131	75	215	138	315T.P.	55	404	106
67	91	132	61	219	136	319	133	405	44
68	91	132B	63	220	136	320	133	410	113
69	91	133	62	221	136	321	133	411	113
70	125	134	62	222	136	322	133	413	113
72	124	135	61	223	136	323	133	414	51
74	124	136	74	229	135	324	133	415	51
75	124	137	74	230	135	325	133	420	103
76	125	138	74	231	135	326	133	423	95
77	124	141	74	232	135	330	83	424	95
78	138	143	74	233	135	331	83	425	95
79	120	151	75	234	135	332	83	426	95

INDEX OF NUMBERS, continued

Tool No.	Page	Tool No.	Page	Tool No.	Page	Tool No.	Page	Tool No.	Page
427	95	549	144	824	95	909	68	977	16
430	126	551	150	825	95	911	68	978	16
431	126	556	144	826	95	912	68	979	16
432	126	557	144	827	95	913	68	980	18
433	126	558	144	835	96	914	70	982	16
434	126	559	144	836	96	919	69	983	16
435	126	560	145	837	96	921	69	984	16
436	126	564	147	838	96	922	69	985	16
437	126	565	147	839	96	923	69	986	16
438	126	566	147	840	96	924	69	988	40
440	126	580	149	841	97	925	20	988P	41
441	126	583	149	843	94	926	21	989	40
442	126	584	149	845	94	930	82	989P	41
443	126	600	140	850	102	931	82	990	40
444	126	601	140	851	102	932	82	990P	41
445	126	602	140	852	102	933	19	990P/1	41
446	126	603	140	853	102	935	30	991	42
447	126	605	140	854	102	936	30	991P	43
448	126	606	140	855	102	938	24	992	42
450	27	607	140	856	102	940X	28, 29	992P	43
452	27	609	141	857	102	941X	28, 29	992P/1	43
453	27	630	151	858	102	942X	29	993	42
454	27	631	151	859	102	943X	29	993P	43
455	27	633	151	860	102	944X	29	998	40
456	27	647	150	861	100	945X	29	1000	157
457	27	653	150	861/1	101	946	20	1002	158
458	27	689	151	862	98	947	21	1005	158
459	27	690	152	863	99	948X	29	1006	157
461	26	691	152	866	21	949X	29	1007	56
465	32	692	152	875	95	950	112	1021	25
474	31	696	151	876	95	951X	29	1024	25
475	32	697	151	877	38	952	34	1025	25
491	58	768	139	878	23	953	34	1032X	29
492	58	770	139	884	104	954	34	1044X	29
493	58	772	139	885	104	955	34	1050	110
494	58	773	139	887	108	961	11, 12,	1051	110
495	58	774	139	888	108		19, 22, 23	1052	110
496	58	775	139	890	39	964	13	1054	110
499	66	776	150	895	38	965	13	1055	110
522	146	781	148	897	34	966	16	1057	109
523	146	782	148	898	34	967	16	1058	109
524	146	783	33	899	34	968	16	1059	109
525	146	784	33	900	34	969	16	1061	111
533	130, 132	785	33	902	36	970	16	1062	111
539	147	786	33	903	35, 36	971	16	1063	111
540	145	790	143	904	37	972	16	1066	111
544X	150	791	143	905	37	973	16	1106	70
546	145	804	103	906	37	974	16	1109	70
547	144	821	97	907	37	975	16	1112	70
548	144, 145	823	95	908	37	976	16		

INDEX

	Page
Adjustable Squares	51
Bearing Scrapers	127–132
Blow Lamps	140–142
Blow Pipes	140
Box Spanners	144–147, 150
Cabinet Scrapers	151
Cabinet, Toolmaker's	56
Callipers — Firm Joint	83–88
„ Spring	86, 89–91
„ Stainless	88
Carbon Scrapers	123, 129
Carded Taps and Dies	102, 103
Cases Taps and Dies	98–101
Cases Micrometers	25
Cases of Tools	76–82
Centre Punches 115, 118, 119 120, 121 and 123	
Certificate of Examination	9
Chisels—Carded	137, 138
„ Cold Knurled	136
„ Cold Octagon	135
„ Model Makers	138
„ Nickel Chrome	133, 134
„ Surecut	133, 134
„ Tests	134
„ Tile	138
Clamps—Toolmakers	113
Combination Gauges	75
Combination Sets	41, 43
Combination Squares	40, 42
Coping Saws	151
Corrugated Iron Chisels	136
Corrugated Iron Punches	136
Depth Gauges	92
Die Adaptor	108
Die Driver	108
Die Holders	104
Die Nuts	95
Dies—B.A. Thread	97
„ B.S.F.	95
„ C.E.I.	96
„ Whit.	95
Dividers—Spring	89–91
Drill Gauge	109
Engineers' Knives	74, 75, 79
„ Scrapers	127–132
„ Scribers	124, 125
„ Squares	45–50
Erectors' Scrapers	130
Feeler Gauges	57–73
Feeler Knives	74
Feelimit Gauges	58
Files	149
Firm Joint Callipers	83–88
Gas Taps	96
Gauges—Combination	75
„ Depth	92
„ Drill	109
„ Feeler	57–73
„ Feelimit	58
„ Lead	111
„ Motor	70–73
„ Piston Fitting	66
„ Radius	51
„ Screw Cutting	93
„ Surface	44, 106
„ Wire	109–111
„ Zinc	111
Hack Saw Blades	152
Hack Saw Frames	143
Hexagon Box Spanners	146
Hexagon Tubing	146
High Speed Steel	156
Inside Micrometer Callipers	33, 35–37
Jenny, F. J.	83–85
Knives—Feeler	74
„ Motor	74
Knurl Holder	103
Knurled Chisels	136
„ Turnscrews	142, 143
Lamps, Plumbers' Blow	140–142
Lathe Tools	126
Lead Gauge	111
Leakproof Oil Cans	114
Magneto Files	149
Micrometers	4–39
Micrometers—Adjustment	14
„ Adjustable	28, 29
„ Ball Attachment	23
„ Bench	31
„ Depth	39

	Page
Micrometers—Heads	32, 34
„ How to read	15
„ Indicating Clip	38
„ Inside	33, 35–37
„ Outside	11–31
„ Rolling Mill	39
„ Screw Gauge	27
„ Surface Grinder	26
„ Tube	20
„ Turbine Weardown	38
Micrometer Standards	18
Motor Gauges	70–73
Motor Knives	74
Motor Punches	121, 122
Motor Spanners	144–147
Nail Sets or Punches	116–123
Needle Files	149
Octagon Cold Chisels	135
Oil Cans	114
Padsaws	148
Pad Saw Blades	150
Pin Punches	122, 123
Piston Feeler Gauges	66
Plug Spanners	145, 147
Plumb Bob	154
Pocket Screwdrivers	125
Pocket Scribers	125
Pocket Cases	76–79
Precision Feeler Gauges	57–67
Protractors	41, 43
Punches	115–123
Radius Gauge	51
Ratchet Screwdrivers	112
Scraper Sharpener	120
Scrapers—Cabinet	151
„ Carbon	123, 129
„ Erectors	130, 132
„ Motor	127–132
„ Tube Handled	131, 132
„ Wall	151
Screw Cutting Gauges	93
Screwdrivers—Knurled	142, 143
„ Pocket	125
„ Ratchet	112
„ Screwtite	113
Scribers—On cards	138
„ Double Ended	124
„ Machinists	124
„ Pocket	125
Sets of Tools	76–82
Shears—Tinmen's	108
Showboards	158
Showcases	157, 158
Silver Steel	153–155
Soldering Irons	139
Solder	150
Spanners	144–147
Spark Plug Spanners	145–147
Spring Callipers	89–91
Spring Dividers	89–91
Squares	45–51
Squares—Adjustable	51
„ Combination	40–43
Stainless Callipers	88
Steel Tubing	146
Stocks and Dies	98–103
Straight Edges, Engineers'	52–55
„ Toolmakers'	55
Striking Knife	124
Surface Gauge	44, 106
Surecut Chisels	133, 134
Tables	159, 160
Tap Holders	104–7
Taps—B.A. Thread	97
„ B.S.F.	94
„ C.E.I.	96
„ Gas	96
„ Whit.	94
Tile Chisels	138
Tinmen's Shears	108
Toolmaker's Cabinet	56
Toolmakers' Clamps	113
Tool Wallets	76–81
Try Squares	45–50
Turnscrews—Knurled	142–3
„ Pocket	125
„ Ratchet	112
Wallets—Tool	76–81
Wall Drills	143
Wire Gauges	109–111
Wireless Spanners	150
Wrenches—Tap	104–7
Zinc Gauge	111

THE M&W EQUIVALENT BOOK

gives the most complete range of decimal equivalents ever published. In thousandths to three, four, five and sometimes six places of decimals; fractions of an inch in 1/128ths and corresponding equivalents in metric measurements

PRICE THREEPENCE
POST FREE

If you will send a receipted invoice for 5/- worth of our goods we will send you a copy of this booklet free of charge.

M&W

Printed in England